

## THE ISSUES OF MUNICIPAL RESEARCH

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# MUNICIPAL RESEARCH

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## JAPANESE ADMINISTRATION AND FINANCE

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*A Strong Executive*

Another fact must be understood before one has a proper background for detailed consideration of the Japanese budget system. The fundamental concept of constitutional government in Japan is not that it is a charter granted by the people to their governing agents, but a grant by the Emperor, who, in the exercise of the sovereign power, has incorporated the government around the democratic ideal of the people; conceiving of the Emperor as sovereign—as the one who has the legal right to govern—he consents to parcel out the exercise of the sovereign powers to designated officers who are controlled by representatives of the people,—the representatives, in turn, being elected by a broad, popular electorate. In other words, the electorate and representatives selected by them are a part of the institutional means created by the Emperor for the exercise of sovereignty. Thus the Emperor permits the people to participate in governmental affairs by bringing into existence what we may call the “Royal Constitution.”

*How the Executive is Held Responsible*

Having this conception of the theory of government, Japan, like the European nations which have adopted a budget procedure, began her constitutional government with a strong Executive,—the chief consideration on the part of the Emperor, the sovereign, in the formulation of the underlying charter, being to use the electorate and representatives to make the administrative agent, this strong Executive, responsive to public opinion. The parliamentary system and a broad electorate were concessions to this end.

The budget was the means given whereby the executive ministry would be controlled by the Diet and the electorate. In this constitutional plan, a plan in which the Executive is expected to take the initiative, naturally, the Minister of Finance, the one on whom the Executive must rely for administration of the finances, is an officer of large powers. And among his tasks the most important one is the preparation of the financial plan or proposal which is to be taken up with the representative body,—in short, the budget.

*Budget Prepared by Minister of Finance*

According to Article 4 of the Regulations of Finance (No. 60, the Imperial Ordinance, May 1, 1889), it is provided as follows:

"The Minister of Finance shall annually examine the state of national income and make the general statement of Estimates of Revenues and Expenditure, basing the amounts on the estimated expenses demanded by the different departments of the state."

Thus the Minister of Finance prepares the budget and submits it to the Diet in the name of the Executive, and, after the finance bills have been passed in both Houses, they are promulgated with the sanction of the Emperor.

When the finance authorizations are executed, the Minister of Finance is required to make clear what the annual income and disbursements have been, and for this purpose he depends on the account books which are kept in the Financial Department. He is also required to manage the Cash Office with fidelity, to transact the public business safely and quickly, and finally in the discharge of his duties to present the annual settled account of revenue and expenditure with the reports of the Board of Audit to the Diet for approval.

#### *A Natural Development, Not a Legal Requirement*

While the Minister of Finance is given the power to prepare the budget of Japan, there is no law which defines how far he may go in an effort to enforce his wishes upon the several departments in determining what amounts shall be asked for and to what extent he can increase or decrease the plan of revenue. Therefore we may say that the real power of the Minister of Finance depends upon the ability with which the functions of that office are performed. A man of ability is in such a position that he can effectively demonstrate the political principle: "He who controls the purse, controls the state."

#### *Based on Departmental Estimates*

In practice, however, the budget is based on the estimated amounts requested by the different departments and the amount of revenue which is estimated by the revenue officers. These annual estimates usually do not change so much from year to year, and, if things go on in the ordinary course, many items of the estimates may carry the same amount year after year. But, in the course of events, when funds are needed for some new enterprise, or an increase in funds is desired for an old one, or some new form of tax is proposed, or a new national debt is authorized,



the Minister of Finance is the most influential man—his power and influence being qualified and limited only by the power and influence of other strong ministers, such as the Navy and Army, and the political elements of the government, rather than by constitutional limitation.

How the Minister of Finance shall prepare the budget is a very important question. In the first place, the estimates must be well balanced between annual revenues and expenditures, so that there can be neither too much surplus nor too much deficit. To have both sides well balanced (revenues and expenditures) he must have thorough knowledge of existing economic conditions during the year, the burden of taxation and its effect on commerce and industry, the condition of markets, the industrial prosperity of the nation, opportunities for developing new industrial enterprises, and be able to forecast so far as is possible future economic conditions. He must be one who has a clear vision and sound judgment to perform these important functions in an able manner, and he must also have the aid of many assistants who, through long experience, have developed expertness in the handling of different special phases of the business of the government in order to protect his administration from public criticism and retain the support of a majority of the representatives in parliament.

#### *Organization Used by the Minister of Finance*

To assist the Minister of Finance in the management of affairs and in the preparation of the budget, there are four chief subdivisions in the Financial Department, namely:

- Bureau of Accounts
- Bureau of Taxation
- Bureau of Finance
- Bureau of Banking

#### *The Bureau of Accounts*

Among the bureaus, the Bureau of Accounts is the central office; it is directly responsible for the collection of the data showing the results of past operations, as well as the present condition of the public finances, and is charged with the duty of supervising the preparation of the estimates. The chief functions of the Bureau of Accounts are to look after the affairs relating to:

- 1—The preparation of the general budget or plan for future financing and the general settled account showing the results of past transactions
- 2—The preparation and submission of special budgets
- 3—The preparation of the detail estimates of expenditures
- 4—Keeping the national treasury accounts
- 5—Making the current statement of revenues and expenditures
- 6—Preliminary review of various financial reports and departmental statements
- 7—Supervision of officers who handle cash and of their sureties
- 8—Protecting the integrity of the reserve funds
- 9—Setting up and carrying over the continuing and stated amounts in the budget
- 10—The classification of accounts of revenues and expenditures
- 11—The unification and standardization of accounts of cash and goods
- 12—Reviewing the annual accounts of provinces, counties, cities, towns and other public guilds

The Minister of Finance is required to prescribe the forms and instructions for the preparation of the various departmental estimates, stating how they shall be divided into chapters and sections. It is most important that a classification shall be prescribed so that all expenditures may be kept in the most concise and simple manner and that this classification shall be uniform throughout all the departments of the state. Therefore control of classification is assigned to the Minister of Finance by the provisions of Article 7 of the Regulations of Finance. The most general heads for the division of annual national expenditures of Japan according to the present classification follow units of departmental organisation as follows<sup>1</sup>:

Expenditure for Imperial Household	
“	“ Foreign Affairs
“	“ Home Affairs
“	“ Finance
“	“ Army
“	“ Navy

<sup>1</sup>There are nine departments in addition to the Imperial Household.

Expenditure for Justice	
“	“ Education
“	“ Agriculture and Commerce
“	“ Communications

Expenditures for all purposes within each of these executive jurisdictions are divided into chapters; each chapter is divided into sections; and each section is divided into subsections or items. These are all prescribed by the Minister of Finance according to law.

Article 12 of the Finance Law (No. 4, New Law, Feb. 21, 1889) says:

“The Ministers of State [heads of departments] shall not apply the appropriation for any object other than that prescribed in the budget; nor are they permitted to interchange the amounts of appropriation in each section one for the other.”

For this reason, the classification set forth in the budget is called “The Legislative Classification”—the purpose of each disbursement being determined by the vote of the Diet. The need for such a rule is obvious, since in case the ministers were permitted to apply the appropriations to objects other than those prescribed, all control over funds would be lost and the result would be financial disorder.

What has been said applies to expenditures, but the same strictness is observed in the classification of the revenues, and the Minister of Finance is charged with the duty of determining what the classification shall be.

#### SOURCES OF INFORMATION USED IN THE PREPARATION OF THE BUDGET

As has been said, the Minister of Finance is the central authority for the preparation of the budget, but he has to depend upon many sources for information in its preparation. The fountain head of budgetary information on the revenue side is the “rough estimates of annual revenue,” which originate in the various revenue institutions. On the expenditure side it is the “rough estimates of annual expenditures” and “statements of estimated expenditure,” which are made up by the various ministers of the state.

*Rough Departmental Estimate of Annual Revenue*

The revenue collecting institutions which handle the collection of taxes and other national revenues, chiefly the Financial Department, sometimes the Departments of Agriculture and Commerce, Department of Communication and others, draw up a rough estimate of the annual revenue for the next coming year, from the first of April of that year to the last day of March of the following year, and not later than the last day of May they are required to forward this rough estimate to the Minister of Finance.

The statement of rough estimates of annual revenue is divided into two parts, "ordinary" and "extraordinary," each of which is divided into chapters, sections and subsections, and opposite each item is an explanation if it is estimated that there will be an increase or decrease of amount in comparison with that of the past year. (Art. 1, 2, No. 12 of the Cabinet Order, March 27, 1889.)

The revenues to be collected from taxes are estimated by the Bureau of Taxation. The estimate of the amount to be received from existing taxes the rates of which are not to undergo any change is based on the average actual income from the source for the past three years, and adjusted according to the conditions anticipated for the coming year. In case a new tax is levied, the amount it will bring in is estimated on the basis of the proposed rate applied to an assumed basis for calculating income results.

*Rough Departmental Estimate of Annual Expenditures*

For the preparation of the statement of rough estimates of annual expenditures, there is no procedure set forth in the law or the regulations except as to form. The rough estimates of annual expenditure are incorporated in a statement drawn up by the ministers of the several departments of state and forwarded to the Minister of Finance not later than the last day of May in the fiscal year preceding that to which it relates. This statement, like the statement of estimates of annual revenue, is divided into two parts, "ordinary", and "extraordinary", each of which is subdivided into chapters, sections, and subsections or items, and in case of estimated increases or decreases an explanation is attached opposite the item so changed.

According to the regulations governing the making of the "Estimate of Annual Expenditure" (No. 19, Cabinet Order, 1889) the

amount estimated for salaries of officers is based on the number of officers, and the rate of wages for each. If the number of officers is stated in law, the prescribed number of officers shall be taken as a basis. If the number is not prescribed by law, the actual number who were employed at the date of the first day of April of the preceding year is taken as the basis. As to those who may be employed temporarily, to meet an emergency or a seasonable demand, the average number of employees for the last three years is taken as the basis. (No. 2, 5, above order.)

The estimates for expenditures for materials, supplies and equipment are based on the estimated quantities required and the price of each class of article. Prices which are fixed by contract already entered into must be so stated. Estimates for articles the prices of which are not fixed must be based on current market prices. Quantities are estimated on the basis of experience where possible, and, if determinable, the estimates are based on the average quantity used for the last three years. (No. 2, 4, 6, above order.)

For the refunding of the national debt, aside from the legally fixed amount, the amount shall be adjusted according to the estimated requirement of the fiscal year, and the requisite interest on the debt must be provided for annually. (No. 7, above order.)

Official traveling expenses must be calculated on the estimated number of trips, the class of the traveler, estimated distance, and days en route, according to the conditions of official business. (No. 8, above order.)

The expenditures to be made under previous contract and by the effect of an existing law or regulation must be included in the budget. (No. 9, above order.)

*Rough Collective Estimate of Revenue and Expenditure by the Minister of Finance*

The ministers of the several departments and government offices, having drawn up rough estimates of the annual revenues and expenditures under their control and forwarded them to the Minister of Finance, the latter reviews, corrects and arranges them, and then draws up a rough collective estimate of all revenues and expenditures; this he submits to the Cabinet not later than the last day of June. The form of the collective estimate is the same as is prescribed for the general budget; that is, it is divided both on the side of revenues and on the side of expenditures into two parts, "ordinary" and "extraordinary," and each

of these is subdivided into chapters and sections. Any increase or decrease in the several amounts, as compared with the previous year, must be fully explained.

*Review by Cabinet and Restatement of Estimated Expenses*

After the rough collective estimates of revenues and expenditures have been presented to the Cabinet (not later than the last day of June), the Cabinet deliberates and comes to a decision by the 15th of July. The results of the Cabinet's deliberations are returned to the Minister of Finance, and then the Minister of Finance communicates with the ministers of the several departments. Thereon the ministers of the different departments are requested to redraft their estimated expenses to bring them within the limit by chapters and sections as decided by the Cabinet. This is done in order that the government may have the benefit of reconsideration by the spending officers themselves, who are thus made responsible for efficiency and economy in management before the official budget is prepared. These revised estimates are forwarded to the Minister of Finance not later than the last day of August.

The revised statement of estimated expenses is set forth in minute detail, and shows in like detail the amounts actually spent each year by each department. It is not only divided into chapters and sections under the two general heads "ordinary" and "extraordinary" expenses, but the sections are divided into items and these in turn, if necessary, are subdivided to a point of giving full information. Furthermore, in the statement of actual expenditures, each department is required to show the original accounting source of information for each item.

What the divisions and subdivisions of items shall be is decided by agreement between the Minister of Finance and other ministers. An explanation of each chapter and section, and a general explanation of the expenditures of each different department are required. (No. 8, 9, 10, Regulations of Finance.)

With this information in hand, the Minister of Finance is then required to prepare the general budget, basing the statements on the details of estimated expenses submitted by the various ministers.

PROCEDURE WHICH HAS BEEN DEVELOPED FOR BUDGET  
PREPARATION

In regard to the procedure used in preparing the official budget, Article 5 of the Regulations requires that the Minister of Finance shall examine most carefully all the rough estimates of expenditures submitted by the various ministers of state, and he is given authority to cut down any item, exercising his own discretion. He may also increase the amount of an item at will, though such a thing never happens. He then prepares the rough collective estimates which are submitted to the Cabinet. These are taken up by the Cabinet with all ministers present. It is at this conference that the attitude of the administration is determined regarding the amount of expenditures as well as the revenue and borrowing measures to be presented to the Diet.

*Rough Collective Estimates Gone Over Twice by Cabinet*

As already described, the rough collective estimates or appropriations requested by various ministers are twice examined and amended, if necessary, before the final decision by the Cabinet is reached. In this process, it is but natural that each minister will seek to influence the decision of the Cabinet and to get support to overturn an adverse decision of the Minister of Finance. That is to say, if a particular minister has great power in the Cabinet, he may push his financial program to his own advantage without much check from the Minister of Finance. The Cabinet is able to get controverted points before it and to come to a decision in conference on the estimates of annual expenditures of the various departments with comparative ease, because large parts of the amounts estimated are determined by statute, order, or prior contracts every year, and only a small part is left for consideration either of the Cabinet or the Minister of Finance. This small part usually has to do with plans for new undertakings or extensions of old undertakings and the plans are discussed with a view to having a decision by the Cabinet on questions of policy, the decision being influenced, of course, by the representations and demands of the ministers who seek to enlarge their activities and who will be held responsible for the execution of policies determined.

It is the custom in preparing rough departmental estimates of expenditures to hold a High-Officers'-Meeting in each department at a certain time. This is done in order that they may consider

what new or enlarged appropriations will be requested, and to give a clear and convincing explanation of each proposed change.

The general estimate of the department, after having passed the High-Officers'-Meeting, is formulated as determined with the proposals for new appropriations. The general estimate is then laid before the Minister of Finance by the minister of the department in which the estimate originates and the directors of the bureaus or heads of subdepartments affected, who visit the Minister of Finance and the Director of the Bureau of Accounts personally, if necessary, to explain fully the new proposals. It is by following this procedure that both the executive heads of departments and the Minister of Finance and his official subordinates get the aid of experts in the consideration of the technical details of the service and prepare themselves to answer the questions of members of the Diet when they go before them.

#### LEGISLATIVE REVIEW, AMENDMENT, APPROVAL OR DISAPPROVAL OF THE BUDGET

##### THE PROCESS OF VOTING THE BUDGET

The general budget of revenues and expenditures which is prepared by the Minister of Finance must be laid in printed form before the House of Representatives at the commencement of the session. This is made necessary by Article 65 of the Constitution which reads as follows:

"The budget shall be first laid before the House of Representatives."

##### *Presentation of the Budget in House of Representatives*

The House of Representatives must place the proposed budget in the hands of each member in printed form as soon as it is received from the Minister of Finance, and after two days from the presentation of the budget, it is customary for the Prime Minister and the Minister of Finance to appear in the House and make speeches—the former on the general administrative policy, and the latter on the financial program, explaining the general features of the budget and touching on the economic and financial policy. Thereafter the members of the House of Representatives are privileged to ask questions on the general budget, to which the Minister of Finance must reply.



*Consideration by the Budget Committee*

Upon receipt of the budget, the House of Representatives first refers it to the Budget Committee of the House for investigation. Article 20, Law of the Imperial Diet, says: "Committees shall be of three kinds, a committee of the whole House, standing committees, and special committees." The committee-of-the-whole is composed of the entire membership of the House. There is a standing committee which deals with the budget. This is divided into several sections according to the requirements of the business. The term of standing committees can be for a single session only. The special committees are chosen by the House and specially entrusted with the examination of particular matters.

Thus in each House there are three kinds of committees; Japan, however, does not initially take up the budget in the committee-of-the-whole, as in England; the special standing budget committee takes charge of it as stated above. There are sixty-three members of this Budget Committee. It is divided into nine sections of seven members each—one section for each executive department exclusive of the Imperial Household. The members are chosen in such a way that the Budget Committee in the House contains a fair representation from each political party. The Chairman of the Budget Committee in the House is chosen by and from its own membership.

According to Article 40 of the Law of the Imperial Diet, when the budget is brought into the House of Representatives by the Executive, it is referred to the Committee on the Budget, which is required to finish the examination within twenty-one days from the day on which it is received, and to report thereon to the House. In the meeting of the Budget Committee, the estimates are assigned to the several sections corresponding to departments, where the items are carefully inquired into.

*Report of the Budget Committee, Discussion and Amendment in the House*

After examination by each section of the committee, the chairman of each section is required to report to the Chairman of the whole Budget Committee. Then a conference of the whole Budget Committee is held and a report is made to the House through the Chairman of the Budget Committee; or the Chairman of the Budget Committee may report personally to the

House by making a speech in which he may set forth, not only the opinion of a majority of the committee, but the opinion of the minority with such details of the committee meetings as may seem desirable.

*Discussion and Amendment in the House*

After the Chairman of the Budget Committee reports to the House, the President of the House declares that discussion of the report is in order. Each of the 381 members of the House may ask questions, discuss the items of the budget or the policies of the government, and offer amendments.

The discussion on the budget estimates in the House usually continues from 10 o'clock in the morning until 6 or 7 o'clock in the evening, or about one day. As the Budget Committee is fairly divided between the political parties and the party leaders are members of the committee, there is generally no strong opposition by the leader of the opposition party to the adoption of the report presented by the Budget Committee.

The vote in the House is taken by chapters, as soon as the discussion of the chapter is closed. The report of the Budget Committee is prepared in the form of an appropriation bill to facilitate its passage.

Amendments to the bill can be made on the floor of the House, but no amendment can be put to a vote or even debated unless it is supported by not less than thirty members, as provided by Article 41 of the Law of the Imperial Diet.

*Action by the Peers*

Upon the approval of the budget by the House, with or without amendments, it is sent at once to the House of Peers. Upon receipt of the budget from the lower House, the House of Peers refers it immediately to its own Budget Committee, which is composed of forty-five members, and the process of voting is the same as in the lower House.

There used to be a constitutional question whether or not the House of Peers had the right to amend the budget which the House of Representatives had already passed. But by the Imperial Ordinance of the 25th of Meiji (1892), the House of Peers was guaranteed the same right as the House of Representatives.

*Reference to a Joint Conference Committee*

If the House of Peers approves the decision of the House of Representatives, the budget is immediately reported to the Throne and the Imperial assent begged thereto. But if it has been amended by the Upper House, the Lower House is notified and if it does not agree to the amendments, the Upper House is informed and at the same time a conference of the two Houses is requested. Both Houses then designate a certain number of delegates to a joint conference committee, who meet, confer and draw up an agreed budget and report it to their respective Houses, which thereupon either pass or reject it.

*What Happens if Appropriation Bill Fails to Pass*

\* If the budget of the joint conference committee is not passed by both Houses then the budget fails. In this case, the Executive is authorized by law to operate according to the budget of the preceding year. Article 71 of the Constitution says:

“When the Imperial Diet has not voted on the budget or when the budget has not been brought into actual existence the government shall carry out the budget of the preceding year.”

**POSITION OF THE EXECUTIVE ON CONSIDERATION OF THE BUDGET  
IN THE DIET**

The right to vote the budget belongs to the Diet, but the right to initiate or present the original budget belongs to the Executive, as has been set forth above. It is quite essential, however, to any budget system to define the position of the Executive before the legislative body, for if it can only prepare estimates for the information of legislative committees, then its relation is nothing more than a ministerial agent of these committees. If the Executive is to be made responsible for the financial planning, some provision must be made whereby it can bring its proposals before the approving and appropriating body to openly explain and defend them.

The procedure of the Japanese government may be considered from three points of view as follows:

- 1—The speech of the Minister of Finance in the Diet
- 2—The appearances of the ministers before the Diet and its committees
- 3—The method of taking the vote on the budget

*The Speech of the Minister of Finance in the Diet*

At the time of the presentation of the original budget in the House by the Executive, the Minister of Finance, as the representative of the Executive, goes before the House and makes a speech, explaining its contents and setting forth the financial policy of the administration. To this end he also discusses the condition of the currency and the general economic condition of the nation and other things that are to be taken into account, and closes by urging the passage of the administrative budget bill.

To illustrate the character of this speech, excerpts from the address of Hon. T. Taketomi, the Minister of Finance, made in the House of Representatives in the session of 1916 are given below:

"Gentlemen, I have the honor to introduce the general budget estimate for the next fiscal year, 1916-1917.

"The estimated ordinary revenue for the year amounts to Yen 523,025,319; the estimated amount of the extraordinary revenue amounts to Yen 30,478,945; the total estimated revenue amounts to Yen 553,504,264. As against this the amount of the estimated ordinary expenditure is Yen 397,452,171; the amount of the estimated extraordinary expenditure is Yen 156,052,093; the total estimated expenditure amounts to Yen 553,504,264.

"So far, therefore, as the estimated ordinary revenue and expenditures are concerned, the excess will amount to Yen 125,573,148 over estimated ordinary expenditures. As compared with the budget in force for the year 1915-1916, there is a decrease of estimated ordinary revenue amounting to Yen 14,897,356 and a decrease of the estimated ordinary receipts amounting to Yen 139,979,935, total of the estimated decrease being Yen 154,877,291. The estimated decrease of ordinary departmental expenditures is Yen 39,860,817 and the estimated decrease of extraordinary expenditures is Yen 143,700,529, total estimated decrease of expenditures being Yen 183,561,346.

"For the last two years no budget was voted [the two Houses failing to agree and the old budget holding over as a matter of law], and naturally, the provisional budget of the current year is not of any use for comparison. [Here follows an explanation of the details of the budget submitted with reasons for estimated increases and decreases of items requested for the several departments.]

"It is superfluous to say that our economic situation has been greatly influenced by the present European War, and that our national revenue has been decreased very much thereby. We, the Executive, are trying industriously to recover the situation by economizing in the expenses, but so far the recovery has not

been sufficient, and as to what the future of the war will bring, nobody knows. Therefore, we are endeavoring to reduce the expenses as much as possible. It is planned to execute only those things which cannot well be eliminated this year, and for other desirable undertakings we have only to wait for a time when they will be easier to finance.

"I have given a brief outline of the budget for the year 1916-1917, as above, and now I wish to say a few words on the economic condition of the current fiscal year.

"The economic condition of this current fiscal year in Japan is dull in general, but the influences of the war are such as promise gradually to ameliorate it. In some industries, especially in shipbuilding, navigation, the manufacture of munitions and other goods hitherto imported, there have been some signs of prosperity. The cheerful tone of the American market has produced a recovery in the silk exports.

"As to the good result of the foreign trade, the international monetary balance is gradually becoming favorable to Japan. The amount of gold held at the end of November, 1915, was Yen 505,000,000; compared with Yen 326,000,000 the year before, an increase of about Yen 179,000,000. There is no such record of gold holding in our history, except as a result of a foreign loan which is raised abroad. We are endeavoring to keep our holding up to a high level and at the same time are refunding our foreign loans while we have this good opportunity. [Applause.]

"It is natural to have idle money in such a year as this, when industry is dull, and we should be careful about the money market, the rate of interest having fallen and the prices of stocks and bonds having risen.

"The favorable trade conditions, the increase of gold, idle money, and higher prices of stock are the outcome of the war, so conditions are temporarily abnormal. Short-term money is abundant with low interest, but long-term money is entirely different. This shows clearly how people in the money market are worried about the future of the war, and that the present money market is not in a normal condition. In this abnormal economic condition, it is very important, I believe, to make preparation for the possibility of changes which may come on the return of peace; we must take thoughtful and firm steps, but we should not be hesitant and pessimistic, we must lead the nation to progress and extension.

"Gentlemen, I earnestly desire that you, members of the House, will give your consent to the budget as soon as possible, considering it honestly and sincerely." [Applause.]

#### *The Appearances of Ministers before the Diet and its Committees*

During the session of the Diet, the Ministers of State (heads of executive departments) can present themselves, as representing the Executive. Besides, there are many delegates of the Execu-

tive, appointed to assist the ministers of their own departments, to explain the money bills and answer the questions of members of the two Houses. These ministers and delegates are authorized to make speeches at any fitting time in the session. Article 42 of the Law of the Imperial Diet provides as follows: ,

"The Ministers of State and the Delegates of the Executive shall be allowed at any time to speak. And the speech of no member shall be interrupted in order that they may do so."

And Article 43 of the Law of the Imperial Diet provides:

"When a bill has been referred in either House to a Committee of Ministers of State, the Delegates of the Executive may attend the meetings of the Committee and there express their opinions."

The Ministers of State and the Delegates of the Executive have no right to vote on any measure before any meeting of a Committee of the Diet.

In the meeting of the Budget Committee, the Ministers of State and Delegates of the Executive may attend and explain the reason of increase or decrease of the amount in any division of a department and answer questions raised by members of the committee. But in this committee meeting, no member of the House, except a member of the Budget Committee, can speak, though they can occupy seats and sit as audience; but the meetings are not open to the public. Article 23 provides:

"No stranger other than a member of the House should be admitted to the meeting of either the standing or of the special committees. Members may also be excluded from such meetings by resolution of the respective committees."

and Article 44 provides:

"A committee in meeting may, through the President, demand explanations from the Delegates of the Executive."

Therefore, the Executive is not required to respond unless demands are made through the President of the House, but in practice, members of the committee may discuss direct with the Delegates, and many heated debates often take place between the Delegates of the Executive and members of committees.

*All Requests for Information must Pass through Official Channels*

During study and consideration of the budget in the Diet, any correspondence between the Houses and an Executive officer or

a local assembly, is required to pass through the Ministers of State, or the Delegates of the Executive. Article 75 of the Law of the House says:

"Other than through the Ministers of State and the Delegates of the Executive, neither House can hold any correspondence with any governmental office or with any local assembly."

If the Diet were permitted to communicate with a local assembly or a lower governmental officer direct, it might interfere with Executive orders. If the standing committees were permitted to negotiate with lower executive officers freely and get information which should be kept secret, it would violate the dignity of the Ministers of State. Therefore all correspondence and negotiations between the Diet and the Executive government are required to pass through the Ministers or Delegates of the Executive.

#### • PREPARATION AND PRESENTATION OF MONEY BILLS

The budgetary estimates of Japan may be submitted to the Diet in four parts:

- 1—General account budgetary estimates
- 2—Special account budgetary estimates
- 3—Supplementary budgetary estimates
- 4—Budgetary estimates of continuing expenditures

#### *The General Account Budgetary Estimates*

• The general account budgetary estimates are the estimates of the annual revenues and expenditures for the usual purposes which may be foreseen. They are the principal estimates. The other three are collateral to the general account estimates, but all of them are necessary to complete the budget. The general account budgetary estimates begin with a three or four page summary or general outline of the national finances; this is followed by three or four hundred pages of details divided into about seven hundred sections. This statement shows the revenues first and the expenditures next, dividing each into two parts, the "ordinary" and the "extraordinary," which are again divided into chapters and sections. In the summary, the amounts of revenues and expenditures are balanced.

#### *The Special Account Budgetary Estimates*

The special account budgetary estimates are independent of the general account budgetary estimates. These estimates are

not used unless there is a special condition in the finances which requires it. Article 30 of the Law of Finance provides as follows:

"In case when it is difficult to follow the provisions of the present law on account of special requirements, a special mode of treatment may be allowed."

The special account estimates may be submitted only for such objects as are already authorized by law. Among the objects for which special account estimates may be submitted are such unexpected events as war, epidemic, etc., which might cause a large expenditure. In the fiscal year 1915, the Japanese government had 27 special account budgetary estimates, as follows:

- 1—Account of Japanese Concession in Foreign Countries
- 2—Account of Government of Kwantung Province
- 3—Account of Government of Chosen ..
- 4—Fund for Goods and Material of the Chosen Railway
- 5—Account of Chosen Hospital and Saisei Hospital
- 6—Account of Government of Formosa
- 7—Fund for Material of Government Railway of Formosa
- 8—Account of Government of Sagalen
- 9—Account of Mint Bureau
- 10—Account of Printing Bureau
- 11—Account of Government Monopoly Bureau
- 12—Account of Interest on Deposit in Treasury Department
- 13—Account of Educational Fund
- 14—Account of National Debts Consolidated Fund
- 15—Account of Imperial Railway
- 16—Account of Tokyo Military Arsenal
- 17—Account of Senju Manufactory
- 18—Funds for Adjustment of Military Camp
- 19—Fund of Naval Arsenal
- 20—Fund of Naval Coaling Station
- 21—Account of Tokyo Imperial University
- 22—Account of Kyoto Imperial University
- 23—Account of Tokoku Imperial University
- 24—Account of Kiushu Imperial University
- 25—Account of Schools and Libraries
- 26—Account of Steel and Iron Works Station
- 27—Account of Forest Fund

*Supplementary Budgetary Estimates*

At the time the general and special account budgetary estimates are taken up for passing, the supplementary budgetary estimates



should be presented to the Diet either for the current year or for the next fiscal year. This supplementary budgetary estimate can be only for the purpose of meeting a deficit in current expenses or for expenditures incidental to the execution of existing laws or contracts; it can never be used for financing a new governmental enterprise.

*Budgetary Estimates of Continuing Expenditures*

In regard to the continuing expenditures, Article 68 of the Constitution reads as follows:

“In order to meet a special requirement, the government may ask the consent of the Imperial Diet to a certain amount as a continuing expenditure fund, for a previously stated number of years.”

For example, a large fund may be needed to build warships, to build forts, to open military and commercial ports, or to improve rivers. These enterprises require large amounts of funds and may take many years for their completion. If these enterprises were interrupted by failure to vote funds or by dissolution of the Diet, it would not only be a great loss but might entirely destroy the original plan. So the necessity arises to fix a certain amount of funds to spend each year for a stated period.

MANDATORY PROVISIONS

Besides the four classes of budgetary estimates above mentioned and the raising of national loans, there is another method of creating a liability of the Treasury, and that is, by contract between government and some other party, such as the employment of foreign professors and engineers in government institutions. In such case, the Executive can make no changes unless he gets the consent of the Diet according to Section 3 of Article 62 of the Constitution, which provides:

“The raising of national loans and the contracting of other liability to the charge of the National Treasury, except those which are provided in the budget, shall require the consent of the Imperial Diet.”

*Revenue Provisions Matters of Permanent Law*

A large part of the annual revenue comes from taxes. Collection of taxes is provided for by law and ordinance. Article 63 of the Constitution says:

"The taxes levied at present shall, in so far as they are not remodelled by new law, be collected according to the old system."

That is to say, that the present taxes shall be collected according to the permanent rate, and they shall be paid into the National Treasury regardless of the preparation of the annual budget. Japan has no such movable revenue tax as the Income Tax of England.

In the case of the public industry, which is the second chief source of income, and fees of various kinds, the same conditions prevail and they are collected according to special law or ordinance, leaving no room for consideration by the Diet. It is only in cases of adoption of new taxes, or raising the rates of taxation, that the consideration of the Diet is invoked. Even in these cases, budget scrutiny never touches the real issue, the work being done in the presentation of special tax bills, quite independent of the budget bill. The revenue side of the budget is, therefore, nothing more than a mechanical compilation of incomes from various sources, so as to cover the amount of expenditures required.

#### *Mandatory Provisions on the Expenditure Side*

The real study of the budget by the Diet is on the expenditure side. Article 64 of the Constitution says:

"That the expenditures and revenue of the state require the consent of the Imperial Diet by means of an annual budget."

This broad provision is qualified and limited by Articles 66, 67 and 68 of the Constitution, as follows:

"The expenditures of the Imperial House shall be defrayed every year out of the National Treasury, according to the present fixed amount for the same, and shall not require the consent thereto of the Imperial Diet, except in case an increase thereof is found necessary."

"Those already fixed expenditures based by the Constitution upon the powers appertaining to the Emperor, and such expenditures as may have arisen by effect of law, or that appertain to the legal obligations of the Government, shall be neither rejected nor reduced by the Imperial Diet, without the concurrence of the government."

"In order to meet special requirements, the government may ask the consent of the Imperial Diet to a certain amount as a continuing expenditure fund, for a previously fixed number of years."

*Expenditures of the Imperial Household*

The "expenditures of the Imperial Household" which are provided for in Article 67 of the Constitution are clearly defined in the supplementary rule of the Law of Finance, 23rd of Meiji (1890). This rule enumerates the expenditures which are under the constitutional jurisdiction of the Emperor as follows:

Article 1 of the Supplementary Rule:

- 1—Salaries of military and civil officers and pensions of civil officers
- 2—Expenses of army and navy, gendarme, and colonial militia
- 3—Expenses of pensions, bonuses, medals, prizes, etc.
- 4—Expenses arising from contracts and treaties with foreign countries
- 5—Office expenses and ordinary cost of repairs of all the government institutions

*Expenditures Required by Law*

Article 2 of the same rule defines expenditures which "may have arisen by the effect of law" as follows:

- 1—Expenses of the Imperial Diet
- 2—Expenses of judicial courts, and the Board of Audit
- 3—Gratuity; relief; considerations for voluntary retirement; and aids for dead or wounded
- 4—Expenses for conscription
- 5—Expenses of collecting taxes
- 6—Expenses of prisons
- 7—Expenses of communication routes
- 8—Expenses of ship wrecks at home and foreign countries
- 9—Local expenses of Islands of Okinawa and Ogasawara
- 10—Funds for famine
- 11—Funds for buying back the land for cultivation in Hokaido
- 12—Expenses for rewards and relief

*Fixed Contractual Obligations*

Article 3 defines the expenditures which are "legal obligations of the government" as follows:

- 1—Expenses of Shintoistic shrines
- 2—Fund for refunding national debt, interest and fees

- 3—Funds for local public work authorized by law annually
- 4—Various annual pensions of the Province of Okinawa
- 5—Subsidiary fund and guaranty of interest for school, hospital, steamship, railway, and other industrial and agricultural corporations
- 6—Salaries, rewards and allowances for foreign employees
- 7—Indemnity expenses
- 8—Various repaying funds
- 9—Expenses for handling national treasury
- 10—Interest on deposits
- 11—Rents for real property and houses already leased

*Only Increases Are Left for Consideration in the Diet*

The total amount of the above funds is usually about two thirds of the total annual expenditures of the budget, and if we add to this in addition the continuing appropriations, a very small amount is left for consideration in the Diet. It is only in case these permanent expenses are to be increased that the consent of the Diet is necessary. Thus the scope of vote in the Imperial Diet is very limited; but nevertheless there are sharp debates on the bill.

*How Dissolution May Be Forced On the Executive*

Practically all the members of the Executive belong to the party which has the majority in the House. Usually the Executive consults with the leaders of the majority party on the budget before submitting the budget bill to the Diet. If a majority cannot be obtained to support the budget, it fails to pass; if the Executive persists, the House must be dissolved. Many years ago Japan had several cases of dissolution of the House. But in Japan there is no such custom as to vote "lack of confidence in the Administration" before the details of the estimates are taken up.

Regarding the question whether or not the House has the right to vote for increase of amount of the budget, Article 41 of the Law of the House simply says:

"No motion for an amendment to the budget can be made the subject of debate, unless it is supported by not less than thirty members."

The moving of an amendment on the Budget Bill is more strictly guarded than in the case of an ordinary bill, an amendment

to which may be made the subject of debate on motion supported by over twenty members. But, while there is no provision which precludes a motion or vote to increase the estimates, in practice the House has never increased the estimates since the adoption of the parliamentary system, so that in effect the Diet has only the power to cut down the amount of appropriations proposed by the Executive.

### EXECUTION OF MONEY MEASURES

#### ORGANIZATION FOR EXECUTION

The Executive department has the right and duty to execute all money measures as passed by the Diet and approved by the Emperor. On this there are two fundamental principles which are observed:

First: That receiving officers shall be independent of those who make payments

Second: That the Treasury shall be independent of those officers who are charged with authorizing expenditures.

#### *Organization of the Treasury and Procedure Governing It*

The receiving officers are divided into two groups:

- 1—Officers issuing orders for collection
- 2—Officers making collections or receiving money

Article 10 of the Law of Finance provides:

“Taxes and other revenue shall be raised in accordance with the provisions of the law and ordinances. Taxes and other revenue shall not be levied, except by officials qualified therefor by laws or ordinances.”

#### *Officers Issuing Orders for Collection*

Orders for the collection of internal revenue are issued by the Directors of the Internal Revenue. The orders for the collection of the customs revenue are issued by the Directors of Custom Houses. The internal revenue and customs revenue as well as the land tax and other taxes are included in what are known as “national taxes”. These originate in an order of collection or “Tax Notice”, which describes the amount of duty, the date and the place of collection.

The land tax, the income tax, the business tax, the soy tax, and the patent medicine tax are handled through the city,

town and village authorities. The national revenue collector, sends out the official advice which shows the rate to be collected by the officers of cities, towns and villages. The officers of cities, towns and villages who have received official advices, send out the "tax notice" to payer, making out the notice, referring to the official advice. For this the national government pays 7/1000 of the land tax and 4/100 of other taxes to the cities, towns and villages as collection fees.

The orders for collection of revenues other than national taxes are issued by the Treasury Department, except those which are otherwise specially provided for by law.

#### *Receiving Officers*

The collecting agent of the government is an officer who handles cash under strict provisions of law; he receives taxes, fees and other revenues directly from payer; he is required to deposit a specified amount with the government as security, according to the Imperial ordinance, which runs as follows:

#### Article 28, Law of Finance:

"The officers who are charged with the receipt or disbursement of cash, and with receiving and issuing materials as determined by the Imperial ordinance are required to deposit security."

As soon as the receiving officer receives cash from payer, he issues a receipt to the payer, and at the same time he sends a duplicate receipt to the Revenue Receiving Officer. The cash which he receives must be forwarded to the Cash Office once or several times during the month under the stated regulation prescribed by the Minister of Finance. In the interior districts where the means of transportation are inadequate and there is no Cash Office, the Revenue Receiving Officer is allowed to hold the cash for over one month and to transfer it to other cash offices, by order of the Minister of Finance, at a convenient time. If a Receiving Officer should lose the cash which is in his charge, by fire, flood, robbery, or by any other cause, he is not relieved from his responsibility unless he proves to the Board of Audit that the loss or injury was unavoidable.

When the officers of cities, towns, or villages act as the collectors of national revenue, these officers must pay in the amount which they have collected to the Cash Office within three days. There are also cases specially authorized where the Cash Office

can directly receive from payer without passing through the collecting officer or office of city, town or village.

All national revenues are required to be paid into the Cash Office, and no disbursement of cash can take place without passing through the Cash Office. The Cash Office is managed by the Nippon Ginko—Bank of Japan, under the provision of Article 31, Regulations of Finance:

“The government may entrust the Nippon Ginko with the management of the Treasury funds.”

The officers authorized to disburse money are divided into two groups: (a) officers who issue orders of payment, and (b) officers who pay out the money. These two groups of official duties cannot be discharged by one person at the same time.

#### *Persons Authorized to Order Expenditures*

Each Minister of State (head of department) can act as an officer to issue orders of payment, but the Ministers usually entrust this authority to the Vice-Ministers or other officers. The Minister of State cannot pay out directly any amount of funds, even one cent, but all the money which comes into the department is at once put into the National Treasury, and if needed for expenditures an order for payment must be issued to the Treasury. Article 12, Law of Finance, provides:

“The Minister of State shall hand over to the Treasury all receipts under his control and shall not make use of them directly.”

#### *Disbursements Made on Estimates*

There are many requirements governing the issue of orders for payment. Among them is one providing that each department of state shall draw up an estimate stating the necessary expenses of the department based on the limit of the annual budget and shall send a copy to the Minister of State and the Board of Audit. The estimate of the amount needed is made for the convenience of those who must execute the budget. This estimate must not exceed an amount legally authorized by each section of the act of appropriation, and the items of the estimate must correspond with the standard items detailed in the budget.

*Control by the Minister of Finance*

When the Minister of Finance receives the estimates of cash needed from all the departments, he sends them to the Cash Office and makes known the maximum amount that the office will be called upon to pay out. The officers authorized to issue orders of payment must inspect at each issue the following matters:

- a—Is the expenditure necessary or rightly demanded?
- b—Does the amount requested exceed the estimate?
- c—Is there a mistake in the budget item to which payment is to be charged?
- d—Is the stated fiscal year erroneous?
- e—Is it against the purpose for which expenditure is authorized? (Article 32, Regulations of Finance.)

The officer authorized to issue an order of payment shall send the advice of payment to the Cash Office at the time of sending the order of payment to the payee. (Article 36, Regulations of Finance.)

*Disbursing Officers of the Treasury*

Paying officers disburse money only on orders of payment issued by authorized officers. The office from which money is disbursed is generally known as the "Treasury." The business of the Treasury is managed by the Nippon Ginko, when the term "Cash Office" instead of "Treasury" is used for the disbursing office. In the cases designated below, the Ministers of State may issue orders for advances to competent officials or to banks specially nominated by the government. Article 15, Law of Finance, says:

"The Minister of State shall not issue orders of payment, except in favor of a legitimate creditor of the government or his agent. For the expenses enumerated below, the Minister of State, may, however, issue orders for advance payments to competent officials, or to banks specially assigned by the government.

- 1—Payment on the principal and interest of national debts
- 2—Expenses of troops, fleets, and government vessels
- 3—Expenses of government officers abroad
- 4—All expenses to be paid in foreign countries, besides those mentioned in preceding clause



- 5—Expenses to be paid in those districts in the interior where means of transportation and communication are incomplete
- 6—Those miscellaneous ordinary expenses in the different government offices of which the whole annual amount is below one thousand Yen
- 7—Expenses of offices which cannot be settled in one place
- 8—Expenses of work carried out under direct supervision of the different government offices, provided such expenses do not exceed five thousand Yen for each official

The Cash Office shall pay cash in exchange of receipt from payee when the order corresponds with the advice issued by authority to issue order of payment, and if the order of payment is against the law it can never make any payment."

#### METHODS OF MEETING A DEFICIT

•There are three ways which the Executive may take to meet a deficit caused by unexpected events which may occur during the execution of the budget,—by transfers, by payment out of reserve funds, by "emergency measures".

#### *Transfers Between Items or Subdivisions of Budget*

•The chapters and sections which are called the "Legislative Classification" cannot be interchanged, but a transfer between subdivisions and items of the same section of the appropriations is permitted in the discretion of the ministers.

#### *Pay Out of the Reserve Funds*

•Article 69 of the Constitution provides for the establishment of a reserve fund in language as follows:

"In order to supply deficiencies which are unavoidable in the budget and to meet the requirements unprovided for in the same, a reserve fund shall be provided in the budget."

Supplementary to this constitutional requirement, Article 7, Law of Finance, provides:

"The reserves to be provided in the budget shall be divided into the following two classes:

- 1st Reserve
- 2nd Reserve

"The first reserve shall be used to supply deficiencies in the budget which are unavoidable; the second reserve shall be used to meet the necessary expenses unprovided for in same."

The first reserve is the fund which is provided to meet the deficiency in the chapters and sections, and at the present time one million Yen are provided for this purpose. The second reserve fund is provided to meet unexpected occurrences such as a natural calamity and other contingencies which cannot be foreseen and therefore cannot be provided for in the chapters and sections of the budget. At the present time two million Yen are annually provided for this purpose.

### *Meeting Financial Emergencies*

The two reserve funds mentioned, amounting to three million Yen, may not be sufficient to meet such exigencies as war and other unexpected happenings for which very large amounts are required and the exigency may be of a character which would not allow time for the convocation of the Diet. In such a case the Executive is allowed to take so-called emergency steps of finance under the provisions of Article 70 of the Constitution, which reads as follows:

“When the Imperial Diet cannot be convoked owing to the external or internal condition of the country, in case of urgent need for the maintenance of public safety, the government may take all necessary financial measures by means of an Imperial Ordinance.”

In the case mentioned in the preceding clause, the matter must be submitted to the Imperial Diet at its next session, and its approval must be obtained.

## EXECUTIVE AND LEGISLATIVE SUPERVISION OF THE FINANCES

### SUPERVISION OF THE FINANCES BY THE EXECUTIVE

As has been said, the authority to issue orders for collection and for payment and the right to handle actual cash cannot be combined in one person at the same time. These functions must be kept independent, one from the other. While this rule affords protection, it is necessary to know whether each order for payment is legally issued; whether the cash is handled with fidelity and due regard for the state. These are important matters which cannot be lost sight of in the administration of financial affairs. If transactions in cash were not well supervised, there would be great danger of corruption. Besides the Diet and the Board of Audit there is a system of supervision by the administration itself.

The scope of the Executive supervision includes the daily conduct of reviewing and disbursing officers. The officers who receive cash or hold cash temporarily as advance payment from the Treasury are liable to direct control and inspection by the Minister of Finance, while they must obey every instruction or injunction issued by the ministers of their departments. According to Article 91 of the Regulations of Finance, the Minister of Finance, as well as the minister of any department, can send at any time a special inspector to any one of the cash offices under his control with instructions to audit and review books, cash and other things which he may deem necessary.

When the inspector finds any shortage of cash or loss shown on the government's accounts caused by unlawful or careless acts, the minister of the department may demand reimbursement from the officers responsible at once before inquiry or action by the Board of Audit.

These cash handling officers must also make a statement or account of transactions once a month for presentation to the Board of Audit. But before this is done every statement is required to be reviewed by the officer in authority charged with issuing the orders on which transactions were based.

#### BOARD OF AUDIT'S CONTROL

The Board of Audit of Japan is created by the Constitution as the high institute or authority which has the right to audit and confirm the final account of the expenditures and revenues of State.

#### *Subordinate to the Emperor Directly*

It is subordinate to the Emperor directly, being independent of all the Ministers of State. (Article 1, Law of Audit, No. 15, Law of May 10, 22nd of Meiji—1889.) Article 72 of the Imperial Constitution provides that the final account of the expenditures and revenues of state shall be verified and confirmed by the Board of Audit, and it shall be submitted by the government to the Imperial Diet, together with the report of verification of the Board. But the Board of Audit has no direct connection with the Diet.

#### *A Creature of Administrative Law—not a Political Body*

Being independent of the Legislature as well as of the several departments, the Board of Audit is a part of the administrative

rather than a part of the legislative branch; that is, its action is controlled entirely by law, for the enforcement of which it can be held to account. The duties of the Board of Audit are prescribed by Article 12 of the Law of the Board of Audit, which provides that it shall verify and confirm the receipt and disbursement of public money, invoices and issues of public goods and the national debt account and shall supervise the operations of the general account.

*Audit Powers of the Board*

Article 13 of the Law of the Board of Audit provides that the accounts which are required to be examined are as follows:

- 1—General statement of settled accounts
- 2—Statement of settled accounts of public offices, public building and public property
- 3—Statement of settled accounts of income and expenditure of public and private corporations and public guilds to which the government guarantees subsidy
- 4—Statements of all accounts which are entrusted to the auditing of the Board of Audit by law and ordinance

*Records and Documents Accessible for Examination*

Following are the statements which are submitted to the Board of Audit by various offices as material for examination:

- 1—Statements of budget estimates and revised accounts submitted by each Minister of State
- 2—Notice of payments out of the reserve fund to be submitted by the Minister of Finance
- 3—Statement of amount of annual revenue to be submitted by the revenue collecting officers
- 4—Statement of disbursements to be submitted by officers authorised to issue orders of payment
- 5—Statement of income and disbursements which are to be submitted by the cash handling officers
- 6—Statement of disbursements to be submitted by officers who get advance payment of funds
- 7—Statement of account of income and disbursements to be submitted by the Bank of Japan
- 8—Supporting documents which are required to be attached to above statements

The Board of Audit is authorised to demand of any institution that it present its documents or books at any time considered by the board to be necessary, and it may require an explanation

from the chief of any office or institution, or may examine into any matter by dispatching special auditors to the spot.

*Questions to Be Gone Into by the Board*

The Board of Audit is empowered to examine into the following important points:

- 1—Whether or not the general account, together with the amount of the various final accounts to be submitted from each department, corresponds with the amount of the statement submitted by the cash handling officers
- 2—Whether or not the assessment of revenues, the incurring of expenditures, the owning of government property, its use, transfer, sale, etc., violate any provision of law or budget
- 3—Whether or not the disbursements which went over the limit of the stated budget or were defrayed outside of the budget, have received the consent of the Diet

*Reports of the Board*

The Board of Audit, after examining the documents, draws up reports and at the same time, if the statements audited are found to be correct, issues a "Certificate of Approval", which is handed to the respective officials, thereby releasing them from liability.

The Board of Audit may ask for additional explanations where they appear to be necessary, and may make corrections. If the Board of Audit decides that a statement or account is incorrect or wrong, it may report so to the head of the office, or to the minister of the department for proper disposition.

The Board of Audit must present to the Emperor the result of the examination of the settled accounts of every fiscal year, and may present its opinions about the reform of the financial laws and administrative process when it thinks necessary.

SUPERVISION OF THE FINANCES BY THE IMPERIAL DIET

Article 72 of the Imperial Constitution says:

"The final account of the expenditure and revenue of the state shall be verified and confirmed by the Board of Audit, and it shall be submitted by the government to the Imperial Diet, together with the report of verification of said Board."

The Executive is released from the liability for the budget when the Diet approves the final account, but, even though it

may approve the account, the Diet may vote "lack of confidence" in the Executive, and may submit a formal expression to the Emperor.

*Means of Enforcing Executive Responsibility*

There is no doubt that this parliamentary supervision is instrumental in making the Executive feel a great responsibility for the execution of the budget. Careful attention and every possible effort of the Executive in financial performances are to be expected in view of the delicacy and completeness of the parliamentary control of budget accounting. But there is no provision as to what course shall be followed in case the Diet cannot give consent to the settled accounts by reason of errors or mistakes.

*Accounts which must be Submitted by the Executive*

The general final account must be submitted by the Executive to the Imperial Diet. This is provided by Article 16, Law of Finance, as follows:

"General final account to be laid by the government before the Imperial Diet, after it has received the verification of the Board of Audit, shall be drawn up in the same form as the general budget and shall contain explicit statements as to the following particulars:

*Revenues*

Estimated amount of revenues  
Ascertained amount of revenues  
Amount of revenues received  
Amount of revenues not yet received

*Expenditures*

Estimated amount of expenditures  
Amount of expenditures increased after the determination of the budget  
Amount of expenditures for which order of payment has been issued  
Amount to be carried over to the next financial year."

*Documents Which Must Accompany Accounts*

Article 17 of the same law says that the following documents shall accompany the general final account mentioned in the preceding article, together with the report of verification of the Board of Audit:

JAPANESE PUBLIC FINANCES

- 1—Reports of final accounts submitted by the different departments of State
- 2—Accounts of the national debts
- 3—Accounts of cases in which special modes of treatment are allowed

*The Minister of Finance as Responsible Executive*

The general final account must be drawn up by the Minister of Finance and be submitted to the Diet, usually after an interval of one year and ten months after the expiration of the fiscal year. The House of Representatives entrusts the review of this account to the Final Account Committee, composed of 45 members. In the meeting of the Committee the members may ask the Minister of State or Delegates of the Executive for an explanation of the general final account, and after examining it they report on it to the House. After passing the House of Representatives, it is sent to the House of Peers, where practically the same process goes on through the agency of the Final Account Committee, whose members number 27.

The Japanese budget for the year 1916-17, follows.

JAPANESE IMPERIAL BUDGET

STATEMENT OF STATE REVENUE AND EXPENDITURE  
FOR THE YEAR 1916-1917

Ordinary	STATE REVENUE	(Yen) <sup>1</sup>
Chapter I—Tax .....		312,993,160
		(Yen)
Section 1 Land tax .....	72,592,350	
2 Income tax .....	33,438,186	
3 Business tax .....	20,090,877	
4 Succession tax .....	2,853,302	
5 Travelling tax .....	4,869,954	
6 Mining tax .....	2,958,781	
7 Tax on issue of bank notes .....	1,060,138	
8 Tax on liquors .....	91,719,091	
9 Tax on soy .....	4,908,432	
10 Sugar excise .....	25,339,357	
11 Consumption tax on textile fabrics .....	15,144,115	
12 Consumption tax on kerosene oil .....	1,452,021	
13 Tax on patent medicine .....	247,739	
14 Tax on bourse .....	3,716,483	
15 Customs duties .....	32,024,415	
16 Tonnage dues .....	572,919	

<sup>1</sup> The Japanese Yen, gold standard, is equivalent to \$0.4985 in U. S. money, as set by order of the Secretary of the Treasury, Oct., 1915.

BUDGET SYSTEM OF JAPAN

	(Yen)	
Chapter 2—Stamp Receipts .....	28,991,697	
	(Yen)	
Section 1 Stamp receipts .....	28,991,697	
Chapter 3—Receipts from Public Undertaking and State Monopoly .....	156,934,661	
Section 1 Postal Tel. & Telg. ....	63,775,300	
2 Forest .....	10,659,246	
3 Income from dividend .....	2,764,000	
4 Income from prison industry .....	1,431,492	
5 Income from public property rent .....	323,613	
6 Profit of printing bureau .....	514,284	
7 Profit of monopoly .....	67,803,350	
8 Profit of Tokyo army arsenal .....	1,360,598	
9 Profit of Osaka army arsenal .....	6,720,716	
10 Profit of Senju cloth factory .....	5,200	
11 Profit of naval coal mining station .....	84,331	
12 Profit of naval arsenal .....	429,405	
13 Profit of steel and iron work .....	5,063,148	
Chapter 4—Miscellaneous Income .....	3,095,935	
Section 1 Licenses and fees .....	244,397	
2 Charges on punishment .....	859,318	
3 Indemnity and penalty for broken contracts .....	374,129	
4 Miscellaneous income from taxes ..	153,501	
5 Miscellaneous .....	467,837	
6 Fund for aid of civil officers, their widows and infants .....	372,973	
7 Fund for librarians' and teachers' pensions .....	186,857	
8 Fund for one year volunteer .....	434,232	
9 Receipt from Ogasawara Isl'd .....	2,691	
Chapter 5—Transferred from Special Account for Deposit .....	11,926,859	
Section 1 Interest on deposit .....	11,892,774	
2 Interest and fees .....	34,085	
Chapter 6—Transferred from Special Account for Government General of Chosen .....	5,011,606	
Section 1 Transferred from Special Account for Government General of Chosen ..	5,011,606	
Chapter 7—Transferred from Special Account of Government General of Taiwan ...	4,071,399	
Section 1 Transferred from Special Account of Government General of Taiwan	4,071,399	
<b>Total of Ordinary Revenue .....</b>	<b>523,625,319</b>	
<b>Extraordinary</b>	<b>(Yen)</b>	
Chapter 1—Proceeds of Sale of State Property .....	2,362,951	
	(Yen)	
Section 1 Mining property .....	3,000	
2 Real estate .....	654,560	
3 Building .....	26,068	
4 Industrial building .....	14,300	
5 Material and goods .....	1,423,235	
6 Steamers .....	17,191	
7 Cattle .....	224,591	



JAPANESE PUBLIC FINANCES

	(Yen)	
Chapter 2—Miscellaneous .....		6,329,283
	(Yen)	
Section 1 Miscellaneous .....	232,258	
2 Returned funds .....	422,873	
3 Chinese indemnity .....	2,633,177	
4 Income from interest .....	3,040,975	
Chapter 3—Local Contributions to Expenses Incurred by State for Benefit of Certain Prefectures .....		2,346,390
Chapter 4—Receipt from the Issue of Public Loans .....		1,550,000
Section 1 Loan for Taiwan industrial enterprise .....	1,550,000	
Chapter 5—Forestry Fund Transferred .....		2,692,113
Section 1 Forestry Fund Transferred .....	2,692,113	
Chapter 6—Transferred Fund for Repair of Military Camps .....		835,000
Section 1 Transferred Fund for Repair of Military Camps .....	835,000	
Chapter 7—Fund for Prize to Encourage Scientific Investigation in Imperial Gakushuin .....		100,000
Section 1 Presented by Emperor .....	2,000	
2 Subscriptions .....	98,000	
Chapter 8—Transferred Fund of Mint Bureaus .....		16,950
Section 1 Transferred Fund of Mint Bureaus .....	16,950	
Chapter 9—Subscription Funds .....		212,655
Section 1 For establishment of schools .....	97,956	
2 For school funds .....	37,200	
3 For court and prison bldg. ....	77,500	
Chapter 10—Transferred from Special Account Surplus Funds .....		281,968
Section 1 From warship and torpedo funds ..	127,972	
2 From river improve. funds .....	154,016	
Chapter 11—Transferred from Previous Years .....		13,647,729
Section 1 Transferred from Previous Years ..	13,647,729	
<b>Total Extraordinary Revenues .....</b>		<b>33,649,729</b>
<b>Total Revenue .....</b>		<b>553,462,334</b>

EXPENDITURE

	(Yen)	
Ordinary		
Chapter 1—Imperial Household .....		4,500,000
	(Yen)	
Foreign Affairs		
Chapter 1—Department Proper .....		715,288
	(Yen)	
Section 1, Salary .....	106,570	
2 Building and repair .....	44,476	
3 Miscellaneous salaries and expenses ..	34,582	
4 Salary of foreigners .....	15,000	

BUDGET SYSTEM OF JAPAN

	(Yen)	
Section 5	Expenses of telegraph . . . . .	150,000
6	Expenses of entertainment . . . . .	5,000
7	Expenses of court of international arbitration . . . . .	1,880
8	Government students' expenses abroad . . . . .	18,000
9	Expenses for secret service . . . . .	340,000
Chapter 2—Embassies, Legations and Consulates . . . . .		(Yen) 3,732,085
Section 1	Salary . . . . .	1,900,213
2	Buildings . . . . .	376,496
3	Traveling expenses . . . . .	154,830
4	Salary for foreigners . . . . .	30,171
5	Expenses of court's register . . . . .	4,197
6	Expenses of supervision of Japanese residents in foreign countries . . . . .	144,973
7	Prisoners' expenses . . . . .	16,519
8	Rent of buildings and lots . . . . .	391,006
9	Expenses of telegraph service . . . . .	600,000
10	Expenses of entertainment . . . . .	113,680
Chapter 3—Miscellaneous Expenses . . . . .		31,527
<b>Total . . . . .</b>		<b>4,478,900</b>

Home Affairs

		(Yen)
Chapter 1—Shinto Priests' Expenses . . . . .		130,000
Chapter 2—Expenses of Shinto Temples . . . . .		234,959
	(Yen)	
Section 1	Expenses of national Shinto temples . . . . .	220,000
2	Expenses of Shinto annual celebration . . . . .	3,350
3	Expenses of soldier monument . . . . .	11,609
Chapter 3—Home Affairs Proper . . . . .		376,210
Section 1	Salary . . . . .	157,280
2	Building and repair . . . . .	40,474
3	Misc. salaries and expenses . . . . .	95,562
4	Due to international agreement . . . . .	2,894
5	Expenses for encouragement and reform of industry in provinces . . . . .	50,000
6	Secret service . . . . .	30,000
Chapter 4—Public Health Examination Station . . . . .		139,273
Section 1	Salary . . . . .	34,070
2	Enterprising expenses . . . . .	67,523
3	Opium expenses . . . . .	37,680
Chapter 5—Prefectures . . . . .		9,690,418
Section 1	Salary . . . . .	3,668,430
2	Building and repair . . . . .	396,580
3	Misc. salaries and expenses . . . . .	1,354,601
4	Conscription expenses . . . . .	474,734
5	Expenses to protect native people in Hokaido . . . . .	11,156
6	Police expenses . . . . .	3,427,731
7	Ports expenses . . . . .	116,565
8	Quarantine expenses . . . . .	69,350

JAPANESE PUBLIC FINANCES

	(Yen)	
Section 9 Ogasawara province . . . . .	25,659	
10 Police in Izu Islands . . . . .	11,675	
11 Secret service . . . . .	142,960	
Chapter 6—Subsidiary . . . . .		(Yen) 914,966
Section 1 For protection from contagious diseases . . . . .	476,610	
2 For charity work in provinces . . . . .	50,000	
3 Provincial expenses . . . . .	388,356	
Chapter 7—Transferred Tawaian Customs Income . . . . .		1,058,946
Chapter 8—Various Miscellaneous Expenses . . . . .		240,209
<b>Total . . . . .</b>		<b>12,788,981</b>

Finance

		(Yen)
Chapter 1—Department Proper . . . . .		2,002,456
	(Yen)	
Section 1 Salary . . . . .	170,700	
2 Building and repair . . . . .	40,086	
3 Misc. salaries and expenses . . . . .	100,282	
4 Due to international agreement . . . . .	1,062	
5 Expenses for investigation and audit . . . . .	1,575,234	
6 Deposit bond fee . . . . .	115,093	
Chapter 2—Fee and Interest on Deposits . . . . .		11,926,859
Section 1 Interest on deposits . . . . .	11,892,774	
2 Fee . . . . .	34,085	
Chapter 3—Cabinet . . . . .		461,127
Section 1 Salary . . . . .	101,930	
2 Transaction business expenses . . . . .	79,147	
3 Prize . . . . .	174,343	
4 Civil examination expenses . . . . .	4,775	
5 Civil officer discipline exps. . . . .	932	
6 Secret service . . . . .	100,000	
Chapter 4—Privy Council . . . . .		155,740
Section 1 Salary . . . . .	147,150	
2 Business transaction expenses . . . . .	8,590	
Chapter 5—House of Peers . . . . .		716,891
Section 1 Members' expenses . . . . .	633,256	
2 Salary . . . . .	29,350	
3 Business transaction expenses . . . . .	54,285	
Chapter 6—House of Representatives . . . . .		900,663
Section 1 Members' expenses . . . . .	797,763	
2 Salary . . . . .	30,210	
3 Business transaction expenses . . . . .	72,690	
Chapter 7—Board of Audit . . . . .		208,659
Section 1 Salary . . . . .	164,583	
2 Business transaction expenses . . . . .	44,076	
Chapter 8—Court of Administrative Litigation . . . . .		66,724
Section 1 Salary . . . . .	59,053	
2 Business transaction expenses . . . . .	7,671	

BUDGET SYSTEM OF JAPAN

		(Yen)
Chapter 9—Custom Houses		1,080,849
	(Yen)	
Section 1 Salary	438,295	
2 Building and repair	209,747	
3 Misc. salaries and expenses	299,179	
4 Dealing expenses	17,000	
5 Dividend	39,478	
6 Special officers' expenses	74,450	
7 Secret service	2,650	
Chapter 10—Expense of Inland Tax Collection		9,212,741
Section 1 Salary	2,411,600	
2 Building and repair	361,503	
3 Miscellaneous salaries and expenses	1,588,334	
4 Expenses of committee meet'g	197,099	
5 Dealing expenses	84,969	
6 Printing expenses	115,008	
7 Paid to city, town and village	4,454,238	
Chapter 11—Brew Sake Examination Expenses		71,850
Section 1 Salary	15,840	
2 Business transaction expenses	56,010	
Chapter 12—To Preserve Yokohama Port		117,928
Chapter 13—Funds for Return and Loss		5,717,764
Section 1 Fund for return	5,702,764	
2 Fund for loss	15,000	
Chapter 14—Subsidy for Export		200,226
Chapter 15—Transferred to National Debts Consolidation Funds		118,420,603
Chapter 16—Various Expenses		58,126
Chapter 17—Treasury Reserve Fund		3,000,000
Section 1 First reserve fund	1,000,000	
2 Second reserve fund	2,000,000	
Total		154,319,206

Army

		(Yen)
Chapter 1—Department Proper		396,265
	(Yen)	
Section 1 Salary	249,264	
2 Building and repair	46,565	
3 Misc. salaries and expenses	100,436	
Chapter 2—Military Affairs		72,924,132
Section 1 Salary	22,995,436	
2 Building	913,761	
3 Repair expenses	1,352,886	
4 Traveling expenses	2,108,239	
5 Misc. salaries and expenses	1,489,876	
6 Various allowances	1,390,590	
7 Military attaches in foreign country	114,418	
8 Food supply	20,855,364	
9 Cloth supply	6,770,580	

JAPANESE PUBLIC FINANCES

		(Yen)	
Section 10	Ammunition .....	6,788,144	
11	Horses .....	1,865,466	
12	Military exercise expenses .....	2,217,414	
13	Sickness .....	441,736	
14	Military material .....	1,709,620	
15	Young Men's Military Academy .....	434,232	
16	Military prison expenses .....	45,649	
17	One year volunteer expenses .....	9,082	
18	Transportation expenses .....	1,165,425	
19	Secret service .....	255,474	
			(Yen)
Chapter 3	Military Police .....		3,399,583
Section 1	Salary .....	1,991,112	
2	Building and repair .....	302,187	
3	Misc. salaries and expenses .....	664,455	
4	Various allowances .....	80,030	
5	Food supply .....	159,034	
6	Cloth supply .....	79,265	
7	Ammunition .....	50,178	
8	Horses .....	22,498	
9	Prison expenses .....	2,208	
10	Secret service .....	48,516	
Chapter 4	Invalided Soldier Expenses .....		20,193
Section 1	Salary .....	5,616	
2	Business transaction expenses .....	3,742	
3	Invalided soldier expenses .....	19,835	
Chapter 5	Horse Bureau .....		1,724,953
Section 1	Salary .....	119,788	
2	Building and repair .....	29,594	
3	Misc. salaries and expenses .....	89,290	
4	For encouragement .....	462,573	
5	For enterprising .....	995,156	
6	Medical expenses .....	28,552	
Chapter 6	Contribution to Seikoku Shrine .....		7,550
Chapter 7	Various Expenditures .....		374,081
<b>Total</b> .....			<b>78,855,757</b>

Navy

		(Yen)	
Chapter 1	Department Proper .....		332,059
			(Yen)
Section 1	Salary .....	250,894	
2	Building and repair .....	33,601	
3	Misc. salaries and expenses .....	47,564	
Chapter 2	Military Affairs .....		46,141,195
Section 1	Salary .....	14,200,339	
2	Building .....	356,700	
3	Repair .....	237,118	
4	Misc. salaries and expenses .....	887,897	
5	Various allowances .....	325,444	
6	Food and cloth .....	7,353,429	
7	War vessels and their repair .....	13,691,227	
8	Naval exercise .....	367,284	
9	Sickness .....	267,666	

BUDGET SYSTEM OF JAPAN

	(Yen)	
10	Ports .....	337,951
11	Repair of warship .....	7,429,284
12	Allowance .....	407,489
13	Prison expenses .....	6,589
14	Expenses for water communication .....	165,216
15	Salary of foreigner .....	21,598
16	Secret service .....	80,000
17	Transferred from war vessel exp. . . . .	20,000
		(Yen)
	Chapter 3—Miscellaneous Expenses .....	22,911
<b>Total</b>	.....	<b>46,496,165</b>

Justice

		(Yen)
	Chapter 1—Department Proper .....	183,402
		(Yen)
Section 1	Salary .....	134,101
2	Building and repair .....	18,683
3	Misc. salaries and expenses .....	23,113
4	Examination expenses for judge, district attorney, attorney of law	6,505
5	International prison committee expenses .....	1,000
	Chapter 2—Judicial Courts .....	5,789,395
Section 1	Salary .....	3,674,155
2	Building and repair .....	524,910
3	Misc. salaries and expenses .....	1,013,064
4	Suit and register of expense .....	509,266
5	Secret service .....	68,000
	Chapter 3—Prison .....	5,603,417
Section 1	Salary .....	283,146
2	Building and repair .....	212,339
3	Misc. salaries and expenses .....	2,318,962
4	Prisoners' expenses .....	2,788,970
	Chapter 4—Miscellaneous Expenses .....	61,087
<b>Total</b>	.....	<b>11,588,000</b>

Public Instruction

		(Yen)
	Chapter 1—Department Proper .....	704,131
		(Yen)
Section 1	Salary .....	122,480
2	Building and repair .....	33,685
3	Misc. salaries and expenses .....	134,531
4	International agreement due .....	7,015
5	Fund for encouragement of scientific investigation .....	51,913
6	Fund for prize to encourage scientific investigation in Imperial Gakushuin .....	100,000
7	Government students' expenses in foreign countries .....	254,507

JAPANESE PUBLIC FINANCES

	(Yen)	
Chapter 2—Central Meteorological Observatory .....		76,717
Section 1 Salary .....	26,860	
2 Business transaction expenses .....	49,857	
Chapter 3—Latitude Observation .....		9,518
Section 1 Salary .....	6,190	
2 Business transaction expenses .....	3,328	
Chapter 4—Physician and Pharmacist Examination Expenses .....		80,270
Section 1 Salary .....	2,320	
2 Business transaction expenses .....	36,611	
3 Hospital expenses .....	41,339	
Chapter 5—Universities and Libraries .....		5,929,467
Section 1 Tokyo Imperial University .....	1,360,000	
2 Kyoto Imperial University .....	820,000	
3 Tohoku Imperial University .....	631,205	
4 Kiushiu Imperial University .....	458,839	
5 Schools and libraries .....	2,659,423	
Chapter 6—General Education .....		2,500,000
Section 1 Subsidy to primary education .....	2,000,000	
2 Miscellaneous expenses .....	500,000	
Chapter 7—Technical Education .....		318,000
Section 1 Technical education subsidy .....	280,000	
2 Encouragement of technical education .....	12,995	
3 College for technical school teachers .....	25,005	
Chapter 8—Old Shrine Temple Protecting Funds .....		150,000
Chapter 9—Miscellaneous Expenses .....		2,845
<b>Total .....</b>		<b>9,770,948</b>

Agriculture

	(Yen)	
Chapter 1—Department Proper .....		553,016
Section 1 Salary .....	270,495	
2 Building and repair .....	44,444	
3 Misc. salaries and expenses .....	84,979	
4 International agreement due .....	20,923	
5 Weight and measure expenses .....	49,727	
6 Investigation expenses .....	16,136	
7 Commercial Museum .....	19,256	
8 Fishing supervising expenses .....	28,149	
9 Bull examination station .....	10,707	
10 Educational expenses of technical officer .....	7,500	
Chapter 2—Patent Bureau .....		165,866
Section 1 Salary .....	83,930	
2 Office expenses .....	81,936	
Chapter 3—Forest Expense .....		4,385,075
Section 1 Salary .....	705,070	
2 Office expenses .....	383,336	
3 Enterprise expenses .....	3,296,669	

BUDGET SYSTEM OF JAPAN

	(Yen)
Chapter 4—Mining Office Expense . . . . .	362,445
Section 1 Salary . . . . .	(Yen) 211,560
2 Office expense . . . . .	150,885
Chapter 5—Agricultural Experimental Station . . . . .	174,076
Section 1 Salary . . . . .	71,500
2 Enterprise expenses . . . . .	102,576
Chapter 6—Fishery School . . . . .	124,256
Section 1 Salary . . . . .	32,300
2 Enterprise expenses . . . . .	91,956
Chapter 7—Silk Conditioning House . . . . .	87,851
Section 1 Salary . . . . .	22,080
2 Enterprise expenses . . . . .	65,771
Chapter 8—Cattle Breeding . . . . .	218,103
Section 1 Salary . . . . .	24,110
2 Enterprise expenses . . . . .	193,993
Chapter 9—Industrial Experimental Station . . . . .	195,898
Section 1 Salary . . . . .	64,100
2 Enterprise expenses . . . . .	131,798
Chapter 10—Matting Examining Station . . . . .	55,156
Section 1 Salary . . . . .	13,210
2 Enterprise expenses . . . . .	41,946
Chapter 11—Sericultural Examining Station . . . . .	344,831
Section 1 Salary . . . . .	70,210
2 Enterprise expenses . . . . .	274,621
Chapter 12—Hospital for Cow Disease . . . . .	84,623
Section 1 Salary . . . . .	8,448
2 Enterprise expenses . . . . .	76,175
Chapter 13—Botanical Experimental Station . . . . .	34,696
Section 1 Salary . . . . .	13,540
2 Enterprise expenses . . . . .	21,156
Chapter 14—Subsidy Funds . . . . .	278,994
Section 1 Agricultural Association . . . . .	85,852
2 Industrial experimental school . . . . .	114,569
3 Prevent Sericultural disease . . . . .	60,097
4 Export silk cloth examining exp. . . . .	18,476
Chapter 15—Miscellaneous Expenses . . . . .	65,554
<b>Total . . . . .</b>	<b>7,130,440</b>

Communication

	(Yen)
Chapter 1—Department Proper . . . . .	29,676,659
Section 1 Salary . . . . .	(Yen) 2,866,357
2 Enterprise expenses . . . . .	22,588,206
3 Various returned funds . . . . .	4,210,200
4 Judging expenses . . . . .	1,693
5 International postal union due . . . . .	5,201
6 Secret service . . . . .	5,000



JAPANESE PUBLIC FINANCES

	(Yen)
Chapter 2—Ship Route Expenses . . . . .	389,971
Section 1 Salary . . . . .	211,821
2 Enterprise expenses . . . . .	178,145
Chapter 3—Mercantile Marine School . . . . .	191,385
Section 1 Salary . . . . .	52,510
2 School expense . . . . .	138,875
Chapter 4—Annual Allowance and Pension . . . . .	36,557,669
Section 1 Annual allowance . . . . .	10,382,935
2 Pension . . . . .	26,174,734
Chapter 5—Miscellaneous Expenses . . . . .	51,210
<b>Total . . . . .</b>	<b>67,521,844</b>
<b>Total Ordinary Expenditure . . . . .</b>	<b>397,450,241</b>
<i>Extraordinary</i>	
Foreign affairs . . . . .	2,228,600
Home affairs . . . . .	24,589,037
Finance . . . . .	25,878,478
Army . . . . .	15,383,330
Navy . . . . .	53,418,061
Justice . . . . .	880,664
Public instruction . . . . .	693,073
Agriculture and commerce . . . . .	7,222,663
Communication . . . . .	15,658,186
<b>Total . . . . .</b>	<b>135,958,186</b>
<b>Total Expenditure . . . . .</b>	<b>553,402,334</b>

## PART II

### THE JAPANESE FINANCIAL DEPARTMENT

#### THE ORGANIZATION AND THE FUNCTIONS OF THE FINANCIAL DEPARTMENT OF THE JAPANESE GOVERNMENT

By HYOTE OUCHI

#### INTRODUCTION

The fact that the expenditures of the government tend to increase year by year is evident from the following figures:

FISCAL YEAR	EXPENDITURE (GENERAL ACCOUNT) Yen
1st (1868-1869)	30,505,085
6th (1878)	62,678,600
11th (1878-1879)	60,941,335
16th (1883-1884)	81,030,700
21st (1888-1889)	81,504,024
26th (1893-1894)	84,531,071
31st (1898-1899)	219,767,568
36th (1903-1904)	249,596,131
41st (1908-1909)	636,361,093
46th (1913-1914)	573,633,025
49th (1916-1917)	(Est.) 553,402,334 (See p. 44)

The work of estimating these expenditures, and of raising revenues to meet them, has increased in the course of the years, though not proportionally, and has led to the growth of the Financial Department.

Three stages may be discerned in the history of the growth of the Financial Department. The first stage, which covers the first three years of Meiji Era, was the age of disorder. During the Restoration War the Japanese Government had difficulty in raising revenue, for such power was in the hands of the Shogunate at that time, that the expenditures for the war and other demands had to be met by borrowing money from individuals. One of the prominent statesmen who constituted the new government, under the direct control of the Emperor, took all the responsibility for financing the government. It would be almost

impossible now to trace back the various steps and procedures followed under that régime.

The second stage in the history of public finances began when Hirobumi Ito (later Prince Ito), the Chief of Taxation and Currency, on his return from the United States, to which he was sent in 1870 to learn about the treasury system, prepared a memorial proposing a change in the organization of the Financial Department. In the memorial he said that since the Financial Department was the centre of control over the expenditures of various offices and over the administration of taxation and currency regulations, it would be advisable to divide it into eleven bureaux each under the direction of a Chief. Those proposed bureaux were the Bureau of Taxation, The Bureaus of Receipts and Disbursements, the Bureau of Accounting, The Bureau of Auditing, The Bureau of Minting, The Bureau of Record, The Bureau of Paper Money, The Bureau of Statistics, The Bureau of Building and The Bureau of Publishing.

The government adopted the plan and for about seventeen years the financial organization remained unchanged except in small details that were developed by current demands. During these years various plans of raising revenues and of control over disbursements were tried—with some plans successful and possibly more, unsuccessful. The land tax changed from a rice tax to a money tax; the National Bank Act which followed the American system was replaced, after a trial which had an unsatisfactory result, by the Bank of Japan, a central bank modelled upon the Belgian system.

It was in 1886 that the First Imperial Ordinance concerning the organization of all departments of the government was promulgated (to be modified later, in 1893). At that time the government was preparing for the inauguration of the Imperial Japanese Constitution and it was very important to establish an efficient business system with modern methods in all branches of the government, so that when the Constitution was inaugurated and the Diet came into existence, the government could easily adapt itself to the new circumstances. The functions of the chiefs of departments were defined, the scope of business of each department was fixed, the divisions of the bureaux were changed and the fundamental principles of the present system were laid down.

THE FUNCTIONS AND THE POSITION OF THE FINANCIAL<sup>o</sup>  
DEPARTMENT

The Constitution of the Japanese Empire has an article which gives the Emperor the power to lay down the organization of the Executive and to appoint and dismiss all military and civil officers of the government. (Imperial Japanese Constitution Art. 10.) This naturally enables the government to change the structure of the administrative system at its own accord and judgment, though the fundamental features have remained unchanged since 1893, the year of the promulgation of the Imperial Ordinance concerning the organization of all departments of the government.

The Japanese Government has nine departments, each department under the care of a Secretary of State. The Secretary of State, who, hereinafter, will be termed a Minister, is held directly responsible to the Emperor for the conduct of his office. (Imperial Japanese Constitution Art. 55.) On the other hand, and at the same time, he takes the post of the chief of his department and represents the government as to the affairs of that department; so to speak, he is the connecting link between the policies of the government and the business of the State and through him all policies of the government in power are put into the sphere of the business of State. The nine departments are the Foreign Affairs Department, the Home Affairs Department, the Financial Department (which corresponds to the Treasury Department in the United States), the War Department, the Navy Department, the Justice Department, the Education Department, the Agricultural and Commercial Department and the Communication Department. Besides these there are a few small but important bureaus which stand under the direct control of the Prime Minister, such as the Bureau of Legislation, the Bureau of Decorations, the Bureau of Printing, and the Bureau of Railways. Furthermore, there are two important offices, the Board of Audit and the Court of Administrative Procedure, both standing outside of the Executive, with power to supervise the Executive Administration.

The scope of business which each department is to undertake is laid down in the Imperial Ordinance of 1893, and if any conflicts occur between them they are to be decided in the Cabinet Council, which consists of the Prime Minister and the nine other Ministers.

° The Financial Department, according to the said Ordinance, is to oversee all financial affairs of the State including the business concerning the balance account, cash account, taxes, national loans, currency, deposit in the Treasury, safe-deposit in the Treasury, banking and trust business, and the supervision of the financing of the municipal and other local administrative organizations. (Imperial Ordinance, 1893, No. 209, Art. 1.)

The Minister, the chief of department, is not required by law to consult with the Prime Minister or other Ministers as long as he is faithful to the duties which are assigned to him by the Constitution. However, if he neglects these responsibilities, the Prime Minister may fail to keep his Cabinet in unity and harmony and this may lead to the collapse of the Cabinet.

The Secretary of State for the Financial Department (according to Japanese usage the "Minister of Finance"), bears three different relations to other agencies in the conduct of his office; first, toward other Ministers and the Prime Minister; second, toward the Diet and the Board of Audit; third, toward the nation at large, not through the Diet. An explanation of these three relations is required to understand the position of the Minister of Finance.

In the first position he stands as the chief of a department of the government against the other Ministers as the chiefs of other departments. Representing the governmental finances, he hears the demands for money from all parts of the government and compares these demands with the possibility of increasing revenue, for which he is altogether responsible. He gets the estimate of the next year's expenses from all parts of the government in order to make up the budget, and in the course of this business he receives the demands of the other departments, especially those calling for an increase of expenditures for new enterprises. Before he can consent to the new enterprises and the increased financial demands, he must find some source of revenue sufficient to meet them. The rough total amount of the following year's revenue can easily be anticipated—although the revenue of the government may increase, or may decrease, to a certain extent yearly—because the kind and the rate of taxes are fixed and cannot be changed without the consent of the Diet. This stability of income inclines the Minister of Finance usually to deny the new demands from all parts of the government unless the increased expenditures can be met easily without levying any new taxes, or raising any new loans. If the

Ministers of other departments hold to their opinions and projects and do not agree with the Minister of Finance, as is often the case, the conflicts between them must be decided in the Cabinet Council.

In the second relation, the Minister of Finance represents his department in the Diet, and gives explanation of the budget bills (bills relating to taxation, national loan, money and banking and monopoly) and the settled account, and answers the inquiries and questions raised in the Diet.

The acceptance of the budget in both Houses is a vital question for the Executive; upon it the fate of the Cabinet depends; without it the Executive is not permitted to pay even a penny for new enterprises; and while the Constitution gives the Executive the power to make expenditures according to the last year's budget in case the budget is not approved (Imperial Japanese Constitution Art. 71), the government naturally dislikes to fall back on a previous budget. In this phase the Minister of Finance plays the most prominent rôle of the nine Ministers.

When the budget and bills are pending in the Diet, they are examined by the committees appointed in each House. Many questions and inquiries which demand the answers of the Executive come from the committees; the Minister is kept so busy that he cannot respond to all of them; for this reason many "Government Delegates" are appointed from among the civil officers and technical experts of higher rank and they take the place of the Minister and explain the will of the Executive.

In the third relation, the Minister transacts business in many ways. Sometimes he acts as the legal representative of the State and gives orders to the nation, and at other times, on his own initiative, he acts as an advisor of the people.

The raising and collecting of taxes, the issuing and redeeming of bonds and many other affairs of state are executed in his name, as will be explained in the following pages.

#### THE ORGANIZATION OF THE FINANCIAL DEPARTMENT

The Financial Department of the Japanese Government consists of two systems, and both combined are under the jurisdiction of the Minister of Finance; they are the Central System—or rather, what might be called the Financial Department proper—and the Local System. To the latter system belong ninety-nine Revenue Offices, eight Revenue Superintending Offices, and six Custom Houses. Besides these, the Monopoly Bureau and the Mint

Bureau may be classified as belonging to the Local System, although their relations to it are somewhat different from the revenue institutions, for both bureaus constitute very large and modern establishments.

Aside from the offices belonging to the Local System, the organization of the Financial Department proper, which might be compared to a tree trunk with many branches, will be described.

Under the Minister of Finance and his assistant, the Vice-Minister, the Financial Department proper is divided into one Secretariate and four Bureaus, each having its particular sphere of business.

#### *I. The Minister's Secretariate*

In the Secretariate, all confidential business of the Department is transacted by the Minister and the Vice-Minister. The office is divided into two sections, each having a civil officer of higher rank as its chief. The business assigned to this division is as follows:

##### *(A) The Section of the Secretariate Proper*

1. Confidential affairs of the Department and the Minister.
2. Appointment, dismissal, and promotion of civil officers and clerks.
3. Keeping signs and seals of the Department and the Minister.
4. Mailing and receiving official and private letters of the Department and the Minister.
5. Editing and publishing the monthly and annual reports of the Department.
6. Editing and keeping the public documents.

##### *(B) The Section of Accounts*

7. Estimating the expenditures and preparing the budget of the whole Department.
8. Auditing accounts and balancing of settled accounts.
9. Taking care of governmental properties of the Department.

#### *II. The Bureau of Accounts*

Every proposed expenditure of the government, including General Account and Special Account, is to be estimated and examined before it is put in the budget. And, furthermore,

**THE FINANCIAL DEPARTMENT**

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every expenditure must be examined and tested before it is registered in the Settled Account. All estimating, examining and filing of the budget and Settled Accounts are attended to in this Bureau. Under the chief, several civil officers of higher rank take care of the business, dividing it into two sections; each has its chief-in-charge.

*(A) The Section of Budget and Settled Account*

1. Estimating and examining governmental expenditures of either the General Account or Special Account.
2. Making up the Budget General Account as well as Special Account.
3. Making up the Settled Account and General Account as well as Special Account.
4. Superintending the financing of the municipal and other local self-administrative organisations.

*(B) The Section of Bookkeeping*

5. Keeping a General Ledger of governmental revenue and expenditures.
6. Filling in the daily and monthly balance sheets of the Governmental Account.

**III. The Bureau of Taxation**

The Bureau is the centre of business concerning the taxes. Several civil officers of higher rank take charge of dividing the business into two sections.

*(A) The Section of Domestic Taxes*

1. Levying and raising domestic taxes.
2. Superintending all Revenue Offices.
3. Keeping a Land Ledger by which the land tax is levied.
4. Supervising the revenue plan of the municipal and other local self-administrative organisations.

*(B) The Section of Tariff*

5. Levying and raising tariff.
6. Superintending Custom Houses.
7. Supervising exports and imports.
8. Administering the Bonded Warehouses and Custom Warehouses.
9. Investigating the tariff system.



**IV. The Bureau of Finance**

The following Governmental business belongs to this Bureau.

(A) *The Fisc Section*

1. Investing government funds.
2. Supervising income and payment.
3. Investigating and supervising the currency system.
4. Investigating money market.

(B) *The Section of National Loan*

5. Raising and redeeming of National Loans.
6. Investing and keeping of savings entrusted to the government.
7. Taking care of the safe deposits entrusted to the government.

**V. The Banking Bureau**

1. Superintending of all kinds of banking institutions including the Central Bank, Hypothecating Bank, Colonial Banks, Ordinary Banks, Savings Banks, and banks which have trust business.
2. Superintending of the bond issue of banks.
3. Subsidy for Banks.
4. Examining of banks—all kinds.

Besides the above mentioned there are two councillors with several assistants who act as the legal advisors of all bureaus and sections. All important documents must pass the examination of these councillors as to their legality before the signature of the Vice-Minister or the Minister is affixed.

Two Councillors, four Chiefs of Bureaus, and some of the Chiefs of Sections often hold meetings presided over by the Minister or the Vice-Minister, which are called "Councillors' Meetings", to discuss the important problems of the Department, especially all kinds of bills and budgets.

Although the Constitution bestows the right to take the initiative in making the law upon both the Diet and the Executive (Constitution Art. 38), in accordance with a long established custom of Japanese politics, the initiative is taken more often by the Executive than by the Diet. Be that as it may, it is very difficult work to prepare all bills necessary for the administration and the welfare of the nation. If the Minister or the Vice-Minister sees the necessity of some legislation, he gives his plan and suggestions

to the Chief of the Bureau concerned and asks him to prepare the bill; if the Chief of Bureau himself finds such a need, he acts only with the consent of the Minister. Bills thus prepared in every bureau are sent to the Minister, who calls the Councilors' Meeting to have them discussed and approved.

If the bill is an Imperial Ordinance or "the law in a narrower sense," for which the approval of the Diet is necessary, it goes to the Bureau of Legislation under the control of the Prime Minister and the Cabinet Council to be examined before it is put into effect, with sanction of the Emperor, or brought forward to the Diet, and if it is a Departmental Ordinance, it becomes effective when published in the Official Gazette with the signature of the Minister.

#### THE APPOINTMENT AND THE QUALIFICATIONS OF THE CIVIL OFFICERS

The following five classes of civil officers will be described under separate headings.

1. The Civil Officer of higher rank (Koto-Kan).
2. The Civil Officer of lower rank (Hannin-Kan).
3. The Technical Expert of higher and lower ranks.
4. The Vice-Minister.
5. The Parliamentary Secretary and Assistant Parliamentary Secretary.

##### I. *The Civil Officer of Higher Rank*

The civil officer of higher rank, who corresponds to the commissioned officer of the Army and Navy, holds a very important position in the Department as the Chief, or the Chief Clerk, of the Bureau or the Sections, and his opinion often has weight in appointing, dismissing and promoting the civil officers and technical experts of whom he is in charge, although he is not legally given power to make recommendations.

About twenty of the civil officers of higher rank are in the Financial Department proper and more than two hundred are in the Local System of the department.

No one is entitled to the position of civil officer of higher rank, unless he has satisfactorily passed the proper qualifying examination, and has received his diploma as evidence thereof. The higher civil service examination, as it is called, is held once a year in Tokyo, and gives the candidate a chance to receive the diploma which is an indispensable qualification for the civil

service in any branch of the government and to any higher position in all central departments as well as all local governments, except the Foreign Affairs Department, which has an examination system of a somewhat different kind.

The candidates for the diploma have to go through three stages of the examination. First, their knowledge of foreign languages is tested; they can choose either English, German or French; and at the same time they must write an essay on a given current political or legal problem. The fortunate candidates who have passed this first test must next take what is known as the "paper examination"; the subjects to be tested in this stage are constitutional and administrative law, political economy, civil law, criminal law, and international law; and they have an optional question on civil process law, or criminal process law, or commercial law, or science of finance. Passing this, they come to the third and final examination, which tests the knowledge of the candidates in discussing and debating the same subjects as required in the second written examination. When they have passed these difficult examinations successfully, the diploma is given to them.

It was in 1898 that the system of examination was inaugurated for the purpose of checking the bad influence of political partisanship in the appointment of governmental officers, which might spoil the efficient management of the governmental business. But there are some opinions against this method of selecting officers; some insist that it is too rigid and that as a result the government may miss chances to secure more able, competent men who have no diplomas. Others are of the opinion that too intimate a connection exists between the examination of the higher civil service and the Law College of The Imperial University (of Tokyo and Kyoto), especially because of the fact that almost all examiners are chosen from the professors of the College; this, it is asserted, produces two lamentable effects: first, it interferes with education in the college, making it an institution of preparation for the civil service; secondly, it makes the officers too academic; as a result, the college student lacks independent judgment and the civil officer of higher rank often lacks that common sense which is indispensable for successful business management.

It is natural that in such an old and aristocratic community as Japan, special respect is paid to the man in authority, even if he does not deserve it, and this simple fact is enough to attract

ambitious youths to the career of civil officer. Many of them enter the College of Law in the Imperial University in order to prepare for the higher civil service examination. After four years' study they try the examination, and it is only the capable who are able to pass it and receive appointments as civil officers of higher rank. No matter how much this system may be criticised, the writer ventures to say that it is this system that has enabled the government to be conducted by men of modern ideas who have been educated in domestic and foreign colleges, and to them may be attributed all the merit of the systematic management which is evidenced in the Japanese governmental departments.

Every year the Minister of Finance selects several young men from the successful candidates in the examination and appoints them to the vacant positions. These newly appointed cadets learn business practices under the supervision of the Chief of the Section until they are promoted to a position of higher rank in the Custom Houses, Revenue Superintending Offices, or the Financial Department proper.

### 2. *The Civil Officer of Lower Rank*

There are one hundred and twenty civil officers of lower rank in the Financial Department proper, and more than fifteen hundred are within the Local System all over the country; they are the soldiers who fight the battle of business management. The diploma of civil service examination, which is issued by governments, sometimes prefectural and sometimes central, is a necessary qualification, though the certificate of successful completion of five years in the secondary schools can be used instead; arithmetic, Japanese language, Chinese classics, elementary law, and elementary economics are the subjects of this examination. The treatment of these governmental clerks is none too good, even in comparison with those of clerks in private firms, especially as regards salary, and it is said that this fact often discourages ambitious boys from entering this kind of civil service. It is quite true that their salaries are often scarcely enough to maintain their families, and that they have a rather dark future, for they are seldom promoted to be civil officers of higher rank by "special order".

### 3. *The Technical Experts of Higher and Lower Rank*

Many technical experts are employed as surveyors of tariff and engineers of tobacco, salt or camphor factories; their treat-

- ment, salaries and rank are just the same as those of ordinary civil officers. There are three officers of higher rank, twelve of lower rank, within the Financial Department proper; eighty of higher rank, and more than nine hundred of lower rank in the Local System, who may be classified as technical experts. No special examination is necessary for them, though they are usually picked from the graduates of technical colleges of the Imperial University (Tokyo, Kyoto, Fukuoka and Tohoku) or other technical schools of lower grade.

#### 4. *The Vice-Minister*

The scope of the field in which the Vice-Minister acts is as wide as that of the Minister, for he is not only the actual assistant of the Minister, but also often works as if he were the Minister. The Vice-Minister is chosen from the civil officers of higher rank in the Department, in accordance with custom.

#### 5. *The Parliamentary Secretary and Assistant Parliamentary Secretary*

Recently these two names, "Parliamentary Secretary" and "Assistant Parliamentary Secretary", were added to the list of the governmental officers. As the names themselves imply, their main function is to act as the Government Delegates in the Diet, to explain the intention and will of the government concerning the budget and other measures pending in the Houses. They are appointed from the members of both Houses with no regard to the diploma for civil service. It is said that the Vice-Minister, and other governmental officers, being business men, and having no seat in the Diet, often fail to read the feeling of the Houses; therefore, two members of the Diet are chosen as members of the Executive, and the rôle of interpreter of the policy of the government is given to them. In this way, friendly relations are maintained between the Executive and the Diet. Furthermore, this new way of appointing officers is supposed to give the members of both Houses a chance to learn government business, as very often they have little or no knowledge of how to manage it. In some quarters, it is believed that this is but a needless appendage which only disturbs business-like administration. This criticism arises from the fact that they are said to be less well informed than the former parliamentary delegate who was only a business man.

PART III  
GOVERNMENT OF THE CITY OF TOKYO<sup>1</sup>

BY BARON Y. SAKATANI,  
*Former Mayor of Tokyo, former Minister of Finance*

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CHAPTER I  
ORGANIZATION FOR LEGISLATIVE AND EXECUTIVE  
CONTROL

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The government of Tokyo has passed through various stages of development, each of which may be rightly regarded as an improvement on the last. Through all the numerous changes that have taken place in municipal administration during the last one hundred years the general tendency has been toward greater autonomy. During the Tokugawa régime the city government was partly under the authority of the *bakufu* and partly under the *machikaisho*, a system representing the property-holders on the streets in each ward. This system was replaced in 1873 by the *yeisentaisho*, a sort of Board of Works, whose function was repair and construction of roads and bridges as well as a general supervision of city interests. After Yedo assumed the name of Tokyo in September, 1868 this body was again abolished in favor of a new administration under the governor of Tokyo prefecture. In 1877 the city administration was still further amended and improved, and the governor's sanction obtained to public election of aldermen and city officials. At this time the administration was divided into two departments: one for discussing and planning the interests of the city, and the other for executing such plans as well as attending to the various departments, such as finance, education, sanitation and cemeteries. It will be seen that herein lay the germ of the later evolution toward modern municipal government. The evolution

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<sup>1</sup> Reprinted, by permission, from "The City of Tokyo", compiled by the municipal authorities and published in 1914.

AREA OF GOVERNMENT LANDS IN DETAIL

WARDS	IMPERIAL PALACE GROUND	DETACHED PALACE	SHRINES AND TEMPLES	IMPERIAL PRINCES	OFFICIAL LANDS	HOUSE SITES	LANDS ADJOINING RIVERS	ROADS AND EMBANKMENTS	RIVERS AND DYKES	LAKES AND PONDS	CEMETERIES	MISCELLANEOUS	GRAND TOTAL
	<i>tsubo</i> <sup>1</sup>	<i>tsubo</i>	<i>tsubo</i>	<i>tsubo</i>	<i>tsubo</i>	<i>tsubo</i>	<i>tsubo</i>	<i>tsubo</i>	<i>tsubo</i>	<i>tsubo</i>	<i>tsubo</i>	<i>tsubo</i>	<i>tsubo</i>
Kojimaochi . . . . .	595,645	14,055	51,900	37,470	486,243	45,000	—	388,800	179,700	—	—	3,300	1,802,113
Kanda . . . . .	—	—	3,300	—	49,403	—	600	405,300	49,000	—	—	23,100	529,703
Nihonbashi . . . . .	—	—	300	—	3,097	—	—	137,400	141,600	—	—	—	282,397
Kyobashi . . . . .	—	74,914	1,300	—	116,216	28,590	600	221,700	84,000	—	—	2,700	529,922
Shiba . . . . .	—	17,345	25,280	33,891	359,019	2,400	—	204,900	23,400	—	5,700	3,700	680,615
Asabu . . . . .	—	—	12,300	—	62,033	6,900	300	108,000	11,700	—	—	4,800	206,093
Akasaka . . . . .	—	184,230	4,920	12,054	286,309	300	—	80,100	25,500	—	—	10,200	606,619
Yotsuya . . . . .	—	—	5,250	—	86,381	—	—	84,000	10,200	—	—	1,500	157,331
Ushigome . . . . .	—	—	19,800	—	325,387	—	300	112,500	30,000	—	—	6,000	493,987
Koishikawa . . . . .	—	—	42,900	—	207,347	2,600	—	145,200	16,800	—	—	24,600	540,647
Hongo . . . . .	—	—	24,000	—	165,374	300	300	96,000	12,000	10,200	—	154,200	452,174
Shitaya . . . . .	—	—	30,000	—	298,251	33,000	—	112,200	15,000	—	—	1,500	489,951
Anakusa . . . . .	—	—	33,300	—	36,815	3,000	—	141,000	82,500	—	—	8,400	305,015
Honjo . . . . .	—	—	15,450	—	117,172	—	—	154,200	153,300	—	—	300	440,422
Fukagawa . . . . .	—	—	10,500	—	248,555	600	—	129,000	193,800	300	—	185,700	768,455
Total . . . . .	595,645	293,550	280,440	83,415	2,937,604	123,600	2,100	2,490,300	1,027,500	300	15,900	435,000	8,285,444

<sup>1</sup>The Japanese *tsubo* is equivalent to 36 square feet, or  $\frac{1}{1,321}$  of an acre.

toward self-government received a decided check, however, a few months later, when all official business of Tokyo was handed over to the management of the prefecture. In the fifteenth year of Meiji,<sup>1</sup> as a result of a general reorganization of cities, towns and villages throughout the Empire, Tokyo again went through a system of municipal reform, ensuring a greater degree of self-government. Acquiescing in the spirit of the age, the central government now issued an ordinance conceding local autonomy to towns and cities, the fifteen wards of the city of Tokyo were recognized as legal divisions of the municipality, and in Osaka and Kyoto, as well as in the capital, municipal governors were appointed with attendant officials and offices. The citizens of the metropolis were not satisfied with the degree of autonomy accorded, and began to agitate for a separate and independent municipal government; and finally in the thirty-first year of Meiji the city administration was thoroughly reformed and placed on a strictly modern basis.

From this time the modernization of the city both in policy and appearance went on apace. Municipal buildings were constructed and an efficient government duly inaugurated. An ordinance issued by the Imperial Government conceded a full revision of the old system, providing for aldermen, and mayor, with city assembly. The function of the city assembly, with its seventy-five members, is to express and enforce the will of the citizens. The mayor is vested with the right of calling the assembly together whenever he deems it necessary for the transaction of business. In addition there is the Municipal Council, which consists of the mayor, the deputy mayors, and members elected out of the city assembly. Two *Shisanyos*, one honorary and the other salaried, are entrusted with the management of certain special works by the mayor, and are present at the Council only when their respective duties so require. Then each city ward has its own assembly as well; and the ward assembly decides the business of the ward. The mayor has the general supervision and control of the whole city; and all subordinate powers do duty under him. He is assisted by three deputy mayors and two *Shisanyos*, chief and assistant treasurers, numbers of committees and assistants of staff, all of whom must carry out the directions of the mayor.

<sup>1</sup>The Meiji era began in 1867, at the end of the Tokugawa era, the termination of the Shogunate.



Under the two deputy mayors are the following divisions of city administration:

Secretary  
 General Affairs  
 Education  
 Sanitation  
 Estate  
 Civil Engineering  
 Finance  
 Accounts  
 Special Water-Works Improvement  
 Special Sewerage Improvement.

There are also various other offices devoted to the interests of the city, such as the Electric Bureau for the management of lighting and rapid transit; bureau for improvement of water supply; bureau of tree planting; asylums; hospitals; charities; and libraries. There are committees of investigation to take into consideration all matters that require examination in the interests of the city; committees for the selection and appointment of inspectors of hygiene and sanitation; a committee for the investigation of plans for harbor improvement; an educational committee for the control of public schools; a committee for the promotion of commercial and industrial interests. The main offices under the municipality are the Sewerage System Improvement Section, the Water System Extension Section, the City Electric Bureau, the Sanitary Experimental Station, Labor Exchange, Charity Hospital, the City Asylum and the Disinfection Station.

The following are the main municipal offices with their locations:

OFFICE	LOCATION	WARD
Tokyo City Hall	Yurakucho	Kojimachi
City Assembly Office	City Hall	"
Sanitation and Hygiene	"	"
Forestry and Water	"	"
Sewerage Office	"	"
City Reservoir	Suidobashi	Koishikawa
"	Motomachi	Hongo
"	Sakae-cho	Shiba
City Filter Station	Yodobashi	Toyotama-gun
Electric Bureau	Yurakucho	Kojimachi
City Asylum	Otsuka	Koishikawa
Branch Asylum	Sugamo	Toyotama-gun
"	Funagata	Chiba-ken
Labor Exchange	Otsuka	Koishikawa
"	Tamachi	Asakusa
"	Shinburi	Shiba

*City Hospitals and Disinfection Offices*

The Komagome Hospital is at Komagome, Hongo Ward; the Hongo Hospital at Matsushirocho, Hongo; the Hiroo Hospital at Shimo Shibuya, Toyotama-gun; the Okubo Hospital at Okubomura, Toyotama-gun; the City Charity Hospital at the Imperial Naval Medical College, Tsukiji, and the City Disinfection Office is at Higashi Daikumachi, Fukagawa.

*City Schools*

The Tokyo municipality supports a number of special educational institutions, among which the more important are the Industrial Night School at Mitashikokumachi, Shiba; and another of the same kind at Kikugawacho, Hongo. The City Business College is at Kakigaracho, Nihonbashi; the City Manual Training School at Yanakahatsunecho, Shitaya, with public schools at Tokiwa, Bancho, Kyobashi and Kojimachi.

The Hibiya Library is situated at Hibiya Park and the Fukagawa Library in the ward of the same name. Besides, there are fifteen other libraries in the city.

*Ward Offices*

Kojimachi Ward Office	Itchome, Kojimachi
Kanda " "	Kakigara-cho, Nihonbashi
Nihonbashi " "	Nishiki-cho, Kanda
Kyobashi " "	Tsukiji, Kyobashi
Shiba " "	Atago-cho, Shiba
Asabu " "	Ichibei-cho, Asabu
Akasaka " "	Omotemachi, Akasaka
Yotsuya " "	Araki-cho, Yotsuya
Ushigome " "	Tansumachi, Ushigome
Koishikawa " "	Suido-cho, Koishikawa
Hongo " "	Tatsuoka-cho, Hongo
Shitaya " "	Kitainari-cho, Shitaya
Asakusa " "	Umanichi, Asakusa
Honjo " "	Aioi-cho, Honjo
Fukagawa " "	Reigan-cho, Fukagawa

*City Parks*

NAME	LOCATION	AREA
Kojimachi	Kojimachi	10,277 <sup>1</sup> Frubo <sup>1</sup>
Shimizu-dani	"	3,328 "
Hibiya	"	54,835 "
Sakamoto	Nihonbashi	1,784 "
Ryogoku	"	1,660 "
Shiba	Shiba	146,038 "
Atagoyama	"	4,793 "
Hakusan	Koishikawa	481 "
Yushima	Hongo	3,797 "
Chanomiazu	"	753 "
Shitaya	Shitaya	16,432 "

<sup>1</sup> See footnote, page 55.

**JAPANESE PUBLIC FINANCES**

NAME	LOCATION	AREA
Asakusa	Asakusa	93,160 <i>Tsubo</i>
Imado	"	1,033 "
Midoricho	Honjo	7,915 "
Fukagawa	Fukagawa	19,328 "
Asukayama	Toshima-gun	13,520 "
Toranomon	Shiba	1,464 "
Sukiyabashi	Kyobashi	816 "
Kakigaracho	Nihonbashi	420 "

*City Cemeteries*

NAME	LOCATION	AREA
Aoyama	Akasaka	82,639 <i>Tsubo</i>
Tachiyama	"	5,221 "
Yanaka	Shitaya	33,094 "
Hashiba	Asakusa	896 "
Zoshigaya	Kitatoshima-gun	37,976 "
Semei	"	19,387 "
Shibuya Hanesawa	Toyotama-gun	3,553 "
Kameido	Minami Kateushika	3,927 "

## CHAPTER II

### METHODS OF FINANCING PUBLIC IMPROVEMENTS

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The finances of the city of Tokyo have shown abnormal expansion during the last few years, especially since the war with Russia, keeping pace with the rapid development of the municipality and influenced to a great extent by the appropriations for the tramway system. The fiscal statement for the year 1912 represents an income of Y44,360,000<sup>1</sup> with an expenditure of Y33,940,000, which was quite a change from two years before when the account stood at Y94,000,000 for income and Y56,000,000 for outlay, the difference being due to the municipalization of tramways. In a short time it is expected that the income and outlay of the city will reach a normal figure of about Y23,000,000 for income and some Y22,000,000 for expenditure annually. At present<sup>2</sup> the finances of the city show a tenfold expansion over what they were in 1906. Yet the burden of taxation has not correspondingly increased, as will be seen from the fact that while the annual total taxation for 1904 was only Y1,300,000 the increased indebtedness incurred by acquiring the tramways brought the annual taxation up to no more than Y3,300,000 in 1912. Thus though the expenditure showed a tenfold increase, taxation showed an increase of only two and a half. This good showing is due to the rapid increase in the wealth of the city, especially in property value and population.

The city has at present under contemplation numerous undertakings for the improvement of conditions and facilities encouraging greater development, and these plans involve a vast outlay. In order to lighten the burden of taxation to a degree consistent with the progress of the people it was resolved to meet the financial requirements to some extent by loans. In 1881 a domestic loan of Y10,000,000 was floated for the improvement of streets and water system. Again in 1907 a foreign loan was raised amounting to Y15,000,000 in England, of which Y5,500,000 was used to redeem water works bonds, thus clearing off the domestic

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<sup>1</sup> See note on page 34.

<sup>2</sup> 1914.

JAPANESE PUBLIC FINANCES

indebtedness. The present debt of the city amounts to Y105,000,000, of which the following are the details:

AMOUNT	INTEREST	DATE	SECURITY	OBJECT
£ 1,500,000	5%	July, 1907	City water tax	Riparian and Street works
£ 9,175,000	5%	Feb., 1912	Tramways	Purchase of Tramway system
£10,675,000				

It is expected that the principal of the bonds for city undertakings will be refunded within the next ten years, it having been arranged to redeem bonds to the value of Y729,000 annually after 1916; while the indebtedness incurred by the electric tramway bonds will all be liquidated within the next thirty-six years, the arrangement being to pay back Y5,405,000 annually after 1916.

The city, as already suggested, has in view other great undertakings, such as extension of water and electric systems, putting in a sewer system, improvement of streets, dredging and reclaiming of rivers and water fronts, especially the estuary of the river Sumida, the erection of more school buildings, as well as numerous other essentials to modern progress; and to meet this anticipated outlay a reserve fund is now being formed, which already amounts to Y7,900,000, and will be increased year after year. In addition to the reserve fund there is a surplus of revenue from each fiscal year, which will go far to meet the outlay demanded. How this surplus stands may be seen from the city budget for five years:

YEAR	REVENUE	EXPENDITURE	SURPLUS
1908	Y13,954,766	Y10,518,809	Y3,435,957
1909	11,705,451	7,741,853	3,963,598
1910	13,804,553	9,343,613	4,460,940
1911	91,671,016	83,198,345	8,492,671
1912	39,651,918	30,202,438	9,449,479

In creating this surplus, economy is exercised in ordinary and also in extraordinary directions, the former in 1912 amounting to Y890,000 and the latter economy to Y550,000. These balances will not be regarded as representing a permanent surplus but will be transferred to accounts for succeeding undertakings or added to the reserve fund. The following table will show how the account works out in the case of Extraordinary Economy for one year:

**FINANCING PUBLIC IMPROVEMENTS, TOKYO**

ITEMS	INCOME	EXPENDITURE	SURPLUS	HOW DISPOSED OF
Poor Asylum	Y162,806	Y151,881	Y10,925	Transferred to next year's acct.
River Landings	366,076	41,650	324,426	Added to Street Improvement Fund.
Street Improvement	4,555,518	4,418,892	1,136,626	Transferred to next year's acct.
Bond Sinking Fund	3,351,924	739,786	2,612,138	do.
Water Works	2,327,417	1,682,368	645,049	Added to Water Works Reserve Fund.
Mutual Fire Aid Fund	120,850	46,340	74,510	To next year's acct.
Foundation Fund	5,274	76,153	70,879	
School Building Fund	1,008,789	1,012,270	86,519	To next year's acct.
Electric works	24,501,294	20,733,752	3,767,542	do.
Supplementary Fund for Electric Works	518,474	311,673	206,801	do.
Special Foundation Fund	753,892	19,411	734,481	Transferred to other Foundation Funds.

It may be explained that the Special Foundation Fund includes funds for education, reserve funds for park improvement, for cemeteries, poor asylums, reform work, water works and special schools. With the exception of surplus resulting from poor asylums, riparian works, street improvement, school buildings and electrical works, all surplus from special economy for each fiscal year will be added to the city Foundation Funds, which at the end of 1913 stood as follows:

Municipal properties	Y183,134
Education fund	186,970
Reserve fund for water works	3,444,042
Reserve fund for parks	483,130
Foundation fund for poor asylum	479,894
Reserve fund for cemetery	300,906
Mutual fire aid fund	75,000
Contribution for bridge works	2,957
Foundation fund for charity hospital	152,916
Foundation fund for special schools	9,686
Sinking fund for undertakings bonds	2,561,782
Preservation fund for Nogi residence	2,000
<b>Total</b>	<b>7,882,417</b>

The above described fund is reserved for the extension or improvement of different undertakings or as a sinking fund. At present, the reserve fund for water works is temporarily used for the extension of water works, of sewage works and other purposes.

JAPANESE PUBLIC FINANCES

The sum of Y2,078,781, out of the above mentioned sinking fund, is used temporarily for the construction of public schools, improvement of sewage works, dredging of the Sumida River and reclamation work, while Y1,255,471, out of the above described reserve fund for water works, is transferred temporarily for the same purpose.

The sum of Y130,000, out of the above mentioned education fund, is used temporarily for the construction of a public library.

*Profits of City Property*

The mayor submits an annual budget accompanied by a full account of the city property to the municipal assembly, and the city property is divided as follows:

1. City land in 1912 was more than 1,500,000 *tsubo* and estimated at Y50,000,000 in value, but two thirds of it are used for the public and only one third is rented, which makes a fixed revenue, some part of which is transferred to the reserve fund. Recently reclamation work on the seafront at Shiba and Fukagawa increased the city property, and in about thirty years from now a profit of about Y300,000 yearly will result as a consequence of tree planting at the water works lands.

2. Buildings:

The city hall, ward offices and all other minor buildings are valued at Y2,987,059. These buildings yield no profit but need repairing which amounts to about Y50,000.

3. Cash Debenture Papers:

Deposits and commercial paper amount to more than Y6,000,000 as foundation funds, the details of which are as follows:

ITEMS	BONDS	SHARES & DEBENTURES	DEPOSITS	LOANS
Foundation fund . . . . .	Y94,064	Y75,725	Y10,000	Y —
Engineering . . . . .	1,807	—	1,150	—
Education . . . . .	36,100	—	25,562	135,000
Public Health . . . . .	140,837	40	15,264	—
Cemeteries . . . . .	182,178	—	118,728	—
Poor asylums . . . . .	292,851	260	86,783	—
Water works . . . . .	229,186	393,000	1,566,385	1,255,471
Parks . . . . .	219,496	—	263,634	—
Sinking fund for undertaking bonds . . . . .	—	—	483,000	2,078,782
Mutual fire aid funds . . . . .	—	—	75,000	—
Preservation fund for Nogi residence . . . . .	—	—	—	—
<b>Total . . . . .</b>	<b>1,296,540</b>	<b>469,025</b>	<b>2,647,806</b>	<b>3,469,253</b>

FINANCING PUBLIC IMPROVEMENTS, TOKYO

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4. Other Property:

The value of books, ships, carriages, machines, tools, iron pipes, electric wires, and rails will equal some millions of Yen. These goods, however, are subject to wear and tear and cannot be estimated as permanent property.

*Revenue from Municipal Undertakings*

Among such municipal establishments as water works, schools, public libraries, hospitals, poor asylums, parks, cemeteries and forests, only water works yield revenue, the amount of surplus having accumulated to Y9,300,000 within twenty years, which is kept for either improvement or extension of water works. The account for the fiscal year of 1912 for water was as follows, the income increasing yearly:

ITEMS	INCOME	FISCAL ACCOUNT
Income from property .....		Y111,049
Charges .....		1,454,089
Fees .....		5,086
Works expenses received .....		452,597
Miscellaneous income .....		52,011
Transferred from previous year .....		252,585
<b>Total .....</b>		<b>2,327,417</b>

ITEMS	EXPENDITURE	FISCAL ACCOUNT
Water supply .....		Y701,581
Reservoir .....		142,158
Tamagawa clear water .....		23,562
Kanda clear water .....		2,418
Water source forests .....		35,287
Transfers .....		400,000
Miscellaneous expenditure .....		1,208
Extra expenditure .....		376,155
<b>Total .....</b>		<b>1,682,369</b>

A surplus of Y645,049 was transferred to the water works reserve fund, and the yearly amounts transferred to the reserve fund in five years, 1908-1912, were as follows:

YEAR	INCOME	
	TRANSFERS	NET INCOME
1908	Y477,541	Y1,663,918
1909	351,677	1,691,770
1910	376,482	1,856,912
1911	191,415	1,930,223
1912	252,585	2,074,833



**JAPANESE PUBLIC FINANCES**

YEAR	EXPENDITURE			
	ORDINARY EXPENDITURE	EXTRAORDINARY EXPENDITURE	TRANSFERS	RESERVE FUND
1908	Y876,160	Y248,043	Y474,372	Y191,206
1909	721,842	147,568	400,000	397,555
1910	844,721	473,252	400,000	324,007
1911	924,988	98,777	400,000	445,288
1912	906,212	376,155	400,000	645,049

The reserve fund increases or decreases as expenses are incurred in making emergency repairs or by extension of reservoirs. If it were otherwise, more than half a million Yen would be reserved yearly. In recent years the expenses of the water works management have been retrenched so as to increase the reserve fund, for an establishment like water works is very easily affected by natural calamities. At the same time the population of the city is constantly growing and the demand for water accordingly has increased, and a greater supply of water, especially in summer, is required. Such being the case, the present reservoir equipment is insufficient. Now the plan for a second extension has been drawn and agreed to by the Minister of the Interior, and to complete this plan will require Y20,000,000, so that the reserve fund must be increased in order to carry out the second extension which will make greater profit after completion.

*Profit from Electric Tramways*

In 1911 the management of the electric tramways was taken over by the city and the final account at the end of 1912 was as follows:

ITEMS	INCOME		
	ESTIMATED AMOUNT	FINAL ACCOUNT	BALANCE
Fares .....	Y7,732,595	Y7,903,722	Y +171,127
Charges on electric power .....	812,400	793,796	-18,604
Miscellaneous expenses .....	681,531	687,562	+6,031
<b>Total .....</b>	<b>9,226,526</b>	<b>9,385,080</b>	<b>158,554</b>

ITEMS	EXPENDITURE		
	ESTIMATED AMOUNT	FINAL ACCOUNT	BALANCE
Management .....	Y3,702,866	Y3,912,720	Y -210,054
Interest on bond .....	5,060,327	4,397,119	+663,208
Bond fee .....	76,469	120,654	-44,185
Redemption fund .....	600,000	500,000	+100,000
Transfer to city economy .....	300,000	300,000	—
<b>Total .....</b>	<b>9,739,462</b>	<b>9,230,493</b>	<b>508,969</b>

FINANCING PUBLIC IMPROVEMENTS, TOKYO

*Fiscal Surplus from General Economy*

As described before, nearly 90 per cent of fiscal surplus, Y9,440,000, at the end of 1912 belongs to special economy, while the remainder goes to general economy, and the proportion of these two in recent years is as follows:

FINAL ACCOUNT OF GENERAL ECONOMY			
YEAR	INCOME	EXPENDITURE	BALANCE
1908	Y4,576,809	Y4,163,686	Y413,123
1909	4,694,532	4,267,506	427,026
1910	5,359,252	5,043,434	315,818
1911	6,293,634	5,743,068	550,565
1912	6,600,873	5,710,058	890,814

The final account of the city finances at the end of 1912 was . . . as follows:

ITEMS	NET RECEIPTS		INCREASE OR DECREASE
	BUDGET	RECEIPTS	
Property . . . . .	Y191,566	Y185,673	Y5,893
Charges . . . . .	132,257	142,022	9,765
Fees . . . . .	54,200	61,709	7,506
Royalty to the municipality . . . . .	120,000	325,936	205,936
Miscellaneous receipts . . . . .	413,132	559,003	145,871
Subsidies . . . . .	365,792	433,279	67,487
Contributions . . . . .	67,221	68,073	852
Transfers and money borrowed . . . . .	2,359,053	1,717,825	641,228
Municipal tax:			
Additional tax . . . . .	2,045,059	2,023,025	22,034
Special tax . . . . .	589,681	534,155	55,526
Transfers from previous fiscal year . . . . .	388,344	550,174	161,830
Money borrowed . . . . .	160,000	—	160,000
<b>Total . . . . .</b>	<b>6,866,305</b>	<b>6,600,873</b>	<b>265,431</b>

Note: Transfers from the previous fiscal year and the continuing expenditure are contained in the budget as follows:

(a) Money borrowed . . . . .	Y365,898
(b) Transfers from the previous fiscal year . . . . .	41,165

**Taxation**

The tax burdens of citizens, excepting national tax, are as follows:

YEAR	PREFECTURAL TAX	CITY TAX	SPECIAL TAX		TOTAL
			FOR STREET IMPROVEMENT	WARD EXPENDITURE	
1908	Y1,613,091	Y2,292,511	Y784,709	Y1,206,603	Y5,896,214
1909	1,595,532	1,951,046	776,687	1,345,237	5,668,502
1910	1,918,678	2,675,423	674,814	1,393,011	6,661,924
1911	2,413,113	2,692,444	697,265	1,554,898	7,357,720

<sup>1</sup>The net receipts are Y265,431 less than the budget, which is caused by transferring the money borrowed to the succeeding year by the postponement of undertakings.

JAPANESE PUBLIC FINANCES

Thus the prefectural tax, city tax and ward expenditure in 1911 amounted to about three Yen per head for a population of 2,000,000.

*Surplus from Expenditure*

In 1908, although there was a shortage of Y300,000 in revenue, it was fully covered by the surplus of Y350,000 left over from expenditure, and Y500,000 was transferred to the next year.

YEAR	BUDGET	FINAL ACCOUNT	BALANCE
1908	Y5,928,763	Y4,163,688	Y1,765,077
1909	5,066,477	4,267,506	798,970
1910	6,047,890	5,043,434	1,004,455
1911	6,780,913	5,743,068	1,037,844
1912	6,866,305	5,710,058	1,156,246

The above mentioned balance largely consists of the surplus of undertaking expense which should be transferred to the next year and the net surplus of the general expenditure is only a small part of it. According to the final account of 1913, the details of surplus are as follows:

ITEMS OF ORDINARY ACCOUNT	BUDGET	EXPENDITURE	BALANCE
Municipal office	Y748,803	Y669,626	Y79,177
Ward offices	629,396	613,066	16,329
Municipal assembly	17,118	14,443	2,675
Public works	602,726	577,184	25,542
Education	246,024	228,173	17,850
Municipal gardens	69,789	66,517	3,271
Public health	857,781	813,197	44,583
Relief	91,235	89,691	1,543
Municipal cemeteries	10,612	9,623	989
Industrial encouragement	437	437	—
Municipal lands	41,458	35,161	6,296
Street lights	18,938	18,838	99
Management of municipal money	36,000	19,657	16,342
Special allowance	52,018	49,786	2,231
Transfers	42,170	42,170	—
Miscellaneous expenditure	27,038	26,625	413
Reserve	72,866	—	72,866
<b>Total</b>	<b>3,564,416</b>	<b>3,274,201</b>	<b>290,215</b>
<b>EXTRAORDINARY EXPENSE</b>			
Municipal office	Y27,852	Y25,260	Y2,591
Ward office	50,844	49,826	818
Public works	2,046,837	1,372,853	673,984
Education	690,567	686,168	4,299
Public health	208,190	88,878	119,312
Municipal parks	66,424	40,636	25,787
Municipal cemeteries	1,812	1,427	384
Municipal lands	17,520	17,405	114
Relief	1,000	277	722
Industrial encouragement	3,700	2,200	1,500
Transfers	8,500	8,500	—
Redemption and interest	55,000	19,802	35,197
Expense for the late Emperor's funeral	116,371	115,377	993
Miscellaneous expenditure	7,468	7,243	224
<b>Total</b>	<b>3,301,888</b>	<b>2,435,857</b>	<b>866,030</b>
<b>Grand total</b>	<b>6,866,305</b>	<b>5,710,058</b>	<b>1,156,246</b>

**FINANCING PUBLIC IMPROVEMENTS, TOKYO**

The ordinary and extraordinary expenditures are almost the same, but the surplus of ordinary expense is Y290,000, while the surplus of the extraordinary expense is Y860,000,—about three times larger. In short, the greater part of extraordinary expense is for public works, which do not advance as planned and leave a big surplus unused, which is transferred to the next fiscal year. The details of Y1,156,248 unused, out of expenditure, may be explained as follows:

*Postponed Undertakings*

The surplus of expenditure is caused by postponements and changes of plan; Y780,000 out of the above described surplus came from postponements, such as Y310,000 for the second improvement of the Sumida River, Y150,000 for dredging rivers, Y57,000 for bridge repairing and Y95,000 for buying dumping ground for rubbish and so forth.

All this surplus is transferred to the next fiscal year annually.

YEAR	POSTPONED AMOUNT
1908.....	Y1,398,499
1909.....	613,725
1910.....	840,409
1911.....	627,712
1912.....	786,510

The postponed amount in 1912 was about Y78,000, out of general economy, and besides this from special undertakings such as electricity, sewerage and street improvement, more than two millions of Yen have been transferred to the next fiscal year.

The surplus from postponed expenditure in the last five years is as follows:

YEAR	SURPLUS BUDGET	SURPLUS FROM UNDERTAKINGS	SURPLUS FROM EXPENDITURE
1908.....	Y1,765,077	Y1,398,499	Y366,577
1909.....	798,970	613,725	185,244
1910.....	1,004,455	840,409	164,046
1911.....	1,037,344	627,712	410,132
1912.....	1,156,246	786,510	369,735

*Note:* The surplus of 1908 contains Y195,411 of the undertaking fund for the World's Fair which was abandoned and Y31,221 of the extension fund for the Hiroo and Okubo Hospitals which was also suspended.

The yearly surplus of expenditure transferred thus to the next fiscal year annually sometimes amounted to more than three hundred thousand Yen. However, in some fiscal years it had to cover shortage of income, so that the surplus of expenditure did not increase as appears in the figures; on the contrary, an excess

**JAPANESE PUBLIC FINANCES**

of income occurred. The fiscal surplus in recent years was as follows:

YEAR	SURPLUS FROM GENERAL ECONOMY		BALANCE
	EXCESS OF INCOME	SURPLUS OF EXPENDITURE	
1908	Y304,027	Y352,165	Y48,138
	Shortage		
1909	37,366	185,244	222,610
1910	16,589	164,046	147,457
	Shortage		
1911	127,669	410,324	537,993
1912	292,862	369,735	662,598

In short, the financial condition of the city has generally been sound, excepting in 1908, which was caused by non-receipt of the tax on the city tramway; but 1912 showed about Y300,000 excess of income; at the same time, the annual expenditure has exceeded the annual budget.

## MUNICIPAL RESEARCH

To promote the application of scientific principles to government

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CANADIAN PROVINCIAL BUDGET  
SYSTEMS AND FINANCIAL HISTORY

X71.72

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### CANADIAN PROVINCIAL BUDGET SYSTEMS AND FINANCIAL HISTORY

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## PREFATORY NOTE

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At the suggestion of Dr. F. A. Cleveland, the writer last year began gathering material on behalf of the Bureau of Municipal Research for a concise history of the evolution of Canada's budget systems. The idea was to portray as far as possible the actual as contrasted with the theoretical workings of Canadian methods of financial administration. The present number of **MUNICIPAL RESEARCH** gives an account of the development and distinctive features of Canadian provincial budget procedure. Those who are interested in the subject will find a full description and analysis of the budget system of the Dominion of Canada in one of the forthcoming studies in administration issued by the Institute for Government Research, which is to be entitled "The Canadian Budgetary System." The volume has been prepared by Professor Westel W. Willoughby of Johns Hopkins University and the writer, conjointly, and is to be published by D. Appleton and Company.

HAROLD G. VILLARD.

NEW YORK.  
July 27, 1917.

## CHAPTER I

### FINANCIAL STATUS OF PROVINCES BEFORE AND AFTER CONFEDERATION

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#### *Early Maintenance from Customs Duties*

In the early period of their history, the Canadian people displayed a great aversion to any form of direct taxation. When, therefore, the British North American colonies were granted self-government and allowed to regulate their own expenditures, they all proceeded to obtain as far as possible the necessary funds with which to conduct their affairs from customs and excise duties. These yielded such a large revenue that the Colonial governments were able to look after many local services and improvements which, under ordinary circumstances, would have devolved on the counties or municipalities. Thus it became the duty of the central authorities in the Eastern provinces to keep the roads and highways in repair and to construct bridges where these were needed. The result was an absence of local taxation and a very slow growth in municipal institutions.

In Upper Canada, however, or what is now termed the Province of Ontario, an entirely different state of affairs prevailed. Goods intended for that colony were landed for the most part at Quebec ports and the duties on them collected by the French Canadian authorities. The latter retained the lion's share of these for their own treasury and spent the proceeds lavishly for the benefit of their own particular region. Deprived of its fair share in these customs duties, the Ontario government lacked the means to perform all of the minor services which the other colonial administrations found themselves able to conduct. Consequently, a system of local taxation had to be introduced in Ontario and the local authorities were compelled to carry on purely local administrative functions and improvements. Hence in that section a very comprehensive municipal system arose which was wanting in the other colonies.

#### *Changed Status After Confederation*

With the advent of confederation on July 1, 1867, the financial status of the provinces entering the Dominion underwent a complete change. The projected federal union was strongly op-

posed at first for the reason that the local governments were asked to surrender to a central authority their revenue from customs duties. This would have deprived them of most of their receipts and left them unable to carry on all the local services which they were then performing. This difficulty was finally overcome through having the provinces stipulate, when they relinquished the right of levying customs and excise duties to the proposed federal government, that a portion of the revenue thus collected which would be sufficient to enable them to carry on their provincial affairs without having recourse to direct taxation should be returned to them in the shape of subsidies from the Dominion.

Even with this proviso, however, the receipts of the various provinces suffered a remarkable shrinkage once the federal union was established. Thus in the year following the confederation, Nova Scotia's total receipts were only \$586,696 as contrasted with \$1,857,247 in the year before the confederation took effect. Confronted with a very diminished income, the maritime provinces and Quebec found that without the imposition of direct taxation they would be unable to spend money as freely as formerly on the maintenance of local services. This led to considerable dissatisfaction with the terms of the union, which discontent the federal authorities sought to allay by increasing from time to time the grants to the provinces from the Dominion treasury. The knowledge that the Central government could be generally counted upon to help them over their monetary difficulties has tended unfortunately to increase the prodigality of provincial administrations. These remarks, however, are not applicable to Ontario, whose financial position was improved in no small degree after confederation. In that province, public affairs were conducted with more prudence and economy than elsewhere and the municipalities took upon themselves to perform many local functions, which the general government was expected to look after in the other provinces.

#### *Provincial Governments and their Functions*

With certain slight modifications, the Provincial governments are patterned after that of the Dominion. In place of a Governor-General designated by the English Crown, the federal ministry at Ottawa names the lieutenant governors who are to administer the affairs of the nine separate provinces. These hold office for five years at a time and are seldom reappointed. As in the case of

Canada's Governor-General, their duties are largely nominal and they have no decisive voice in the conduct of public affairs except on the rare occasions when they dismiss the ministry in office. A curious rule exists in regard to the judges of the provincial superior courts. The provincial parliaments have the right of determining the number of such judges, but the Federal government appoints them and its exchequer must assume the cost of their salaries.

"The constitution, organization and maintenance of the courts are left to the Provincial legislatures. The costs and responsibility for the administration of justice, excepting the salaries of the Superior Court judges, are thrown upon the different Provinces, whose Governments are responsible for their peace and good government. So that, when a Provincial Legislature passes an act, declaring that an additional number of judges is required for the due administration of justice, it is incurring a great responsibility for the Federal Parliament and Government to say: 'You do not want them; you can administer justice and keep the peace of the land without them.' As a general rule, I think we may safely trust to the discretion of the Provincial Legislatures in this regard."<sup>1</sup>

At the time of confederation, Ontario was the only province whose parliament was limited to a single chamber. With the exception of Nova Scotia and Quebec, all the other provinces have now followed suit and have either abolished the upper houses of their legislatures or entered confederation with a unicameral legislature. This step was taken not only from motives of economy, but because very unsatisfactory results had been achieved with the bicameral legislative council of United Canada. It was made easy by the fact that the provincial upper houses or legislative councils were without any real importance inasmuch as the houses of assembly possessed the sole right of originating money bills and of determining what sums should be voted for the carrying on of the various government services. Aside from Ontario and Quebec, where the numbers are one hundred and eleven and eighty-one respectively, the membership of the provincial houses of assembly does not exceed sixty.

#### *Federal Provincial Subsidies*

In order to overcome the opposition to confederation when the project of a union of the Canadian provinces was first agitated, the sponsors of the federal government plan felt constrained to deviate from their original intention of placing the entire burden of financing local expenditures on the provinces and to consent reluctantly to a system of federal provincial subsidies. These are of a twofold nature. They consist, first, of certain fixed

<sup>1</sup> Sir John A. Macdonald, *Canadian Hansard*, 1880, p. 118.

grants of money to meet the expense of the provincial legislatures, and, secondly, of direct subvention based on population at the rate of eighty cents per head. Why this particular per capita figure was hit upon has never been clearly explained, but it was probably deemed sufficient to cover the present and prospective needs of the provinces for additional revenue.

Roughly speaking, the annual subsidies now paid the nine Canadian provinces by the Dominion amount to \$11,500,000. These subsidies form approximately one-third of the ordinary yearly revenue of the provincial governments. The proportion varies from one-fifth in Ontario and Quebec to four-fifths of the total government income in Prince Edward Island. In all probability, the provincial subsidies will sooner or later be revised upwards. Between 1905-1906 when the last revision was agreed to and 1912-1913, the revenues of the federal government rose from fifty-six to one hundred and thirty-five million dollars. Until the outbreak of the European War put a temporary damper on any such proposal, certain provincial statesmen had openly stated that the rising national revenues necessitated a readjustment of the provincial subsidies. It must not be forgotten that the provinces do not regard the Dominion subsidies as a gift or a favor to them, but as the fulfilment of an express promise made them when they agreed to confederation. No likelihood exists, therefore, of the present system of provincial subsidies being changed.

Besides having proved a heavy drain on the finances of the Dominion at times, federal government subsidies have exerted a demoralizing influence on the provincial authorities and have caused them oftentimes to make unwise expenditures. From the beginning of confederation and up to 1916 the provincial subsidies have amounted all told to \$264,000,000. The bestowal of this large sum on the local governments has delayed the introduction of direct taxation in the provinces, which would prove the best curb on extravagance as it would lead to a more careful scrutinizing of government expenditures.

#### *Effect of Federal Subsidies on Provinces*

Indeed, the absence of direct imposts has led many Canadian taxpayers to fail to appreciate how government revenues are derived.

"Many people have an indefinite idea that, somehow or other, revenue can be collected without troubling the people in any way, they can't ex-

plain how or in what way revenue is derivable, and never seem to think money for expenditures by the legislature must come from the people in one way or another."<sup>1</sup>

"They (the people) say: 'the more we can get out of the Government the better for us'—just as if the Dominion did not belong to them, and that it was not their money that was being spent. The more money you give to the Local Governments the longer you will prevent them from resorting to direct taxation, and only in that case will the people realise where the money comes from and where it goes."<sup>2</sup>

Furthermore, the knowledge that the Dominion will help them out in case of necessity has caused the provinces to be improvident in many instances and to postpone facing the responsibilities which they were incurring for the future. The subsidizing of the local governments has given rise also to erroneous conceptions concerning taxation and the relations between the Dominion and the provinces. They have been regarded as partners in a joint enterprise in which each participator is entitled to demand a fixed percentage of the profits or, in other words, of the national revenues. More subsidies are demanded on the ground that the fathers of confederation never intended that the Dominion should be rich and the provinces poor. Finally, the Canadian subsidy system has weakened the idea of self-help among the people and has retarded the growth of local self-government.

In addition to the receipts from subsidies, all the provinces have imposed corporation and inheritance taxes, which yield very considerable proceeds in the aggregate. Quebec furthermore imposes special taxes on transfers of real estate and requires persons engaged in business to take out trading and manufacturing licenses. Since 1914, special war taxes have been levied in nearly all the provinces.

Four provinces, namely, British Columbia, Ontario, Quebec, and New Brunswick possess great tracts of forest lands and derive large revenues annually from the sale of timber cutting rights and privileges. Alberta and Nova Scotia are rich in coal deposits and the last named province obtains not far from one-half of its total income from coal royalties. Formerly, liquor licenses produced a large revenue, but this source of income promises to disappear entirely soon owing to the growth of the prohibition sentiment. Except in Prince Edward Island and British Columbia, the provincial governments previous to the outbreak of the European War, had avoided imposing direct taxes for ordinary government purposes and had not resorted to an income tax.

<sup>1</sup> Hon. Mr. Robertson, Quebec Budget Speech, May 2, 1883.

<sup>2</sup> Mr. Foster, Canadian Hansard, 1906-07, p. 5335.

*Debts of the Provinces Steadily Increasing*

Besides having to provide for the expenses of their legislatures and civil governments, the Canadian provinces provide funds for the maintenance of the courts and the upkeep and betterment of roads and highways. In addition, they grant large sums towards the support of the public schools and for the advancement of agriculture. All these services absorb more than all the provincial revenues so that the aggregate debts of the provinces are steadily mounting.

## CHAPTER II

### FEATURES OF PROVINCIAL BUDGET PROCEDURE

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#### *Fiscal Year Periods*

In the various provinces, no uniform rule has been followed regarding the starting and closing of the fiscal year. British Columbia begins its financial year on April 1st; Quebec on July 1st; Nova Scotia on October 1st; New Brunswick and Ontario on November 1st; while in Prince Edward Island the fiscal year coincides with the calendar year. Since confederation took place, several of the provinces have changed the period when their fiscal years should commence. In every instance, this was done in order that the public accounts and auditor general's report for the fiscal year last past might be submitted in printed form to the local parliament.

"It was found on many occasions when the Government attempted to meet the Legislature as they should do in the months of January or February, that the public printing was in a very backward state. This disadvantage was so generally recognised that a year or two ago the Legislature determined to return to the old system and close the fiscal year on the thirtieth of September. In the Province of New Brunswick they had made a similar change, though his impression was that in that Province the fiscal year closed at a different date. . . . If the old system were adhered to in this Province members of the legislature would be detained here until April or May when they were desirous of getting away. Therefore by common consent it was determined to close the fiscal year on the thirtieth of September so as to enable the Government to meet the representatives of the people in January or February."<sup>1</sup>

Just as in the case of the Dominion, some of the provinces allow a certain period after the expiration of the fiscal year for the closing of the public accounts.

"The Government had adopted a plan to keep open the accounts for ten days after the close of the year to receive revenue and to pay expenditures properly chargeable to that year. The Province of Ontario kept their accounts open for fifteen or twenty days. . . . The old Government kept the accounts open until December in order to charge up amounts coming in and to swell the revenue."<sup>2</sup>

Under the Ontario system of keeping the public accounts, however, the provincial books—while closed as far as receipts are concerned—are kept open for a period of eighteen days after the expiration of the fiscal year to allow of additional payments being

<sup>1</sup> Mr. Fielding, *Nova Scotia House of Assembly Debates*, 1895, p. 128.

<sup>2</sup> Mr. Flemming, *New Brunswick House of Assembly Debates*, 1910, p. 70.



made. The reasons for this procedure have been stated as follows:

"It was the practice in both the Imperial and Canadian parliaments to make appropriations for the current fiscal year. The accounts were not closed at the end of the year, but were kept open so that accounts might be paid and charged to the accounts of the year to which they properly belonged."<sup>1</sup>

#### *Re-Votes of Unexpended Balances and Main and Supplementary Estimates*

In the Provincial legislatures, re-votes of unexpended balances of appropriations frequently occur. The following citation describes an example in point.

"For roads the estimate was \$175,000, but I thought it prudent, being in a measure responsible for the carrying on of public affairs, to estimate for the expenditure of \$72,117.66 undrawn the year before. This added to the estimate of \$175,000 makes a total of \$247,117.66, while the amount actually expended was \$210,950.83. This leaves an unexpended balance of \$36,226.83 which will have to be re-voted. It is impossible to have the full amount of the grant drawn during the fiscal year,—parties will leave balances."<sup>2</sup>

Supplementary estimates do not play an important rôle in provincial budget practice. Thus in Quebec the main estimates for the fiscal year 1912-13 called for a total expenditure of \$6,755,820.23. The actual expenditures exceeded those estimated outlays by the sum of \$1,198,164.76, while the supplementary estimates for the year in question carried appropriations for only \$95,000. By far the major part of the additional amount expended was paid out under authority of special or governor's warrants. In Ontario, the Dominion rule is followed of inserting in the supplementary estimates initial appropriations for new public works or buildings. Hence the main Ontario estimates relate merely to the ordinary, routine expenditures of the government.

#### *Capital and Revenue Accounts*

Like the Dominion public accounts, the yearly financial statements submitted to the provincial parliaments make a distinction between capital and revenue accounts. Unusual expenditures of all descriptions, whether donations to Belgian relief funds or amounts expended on betterment of highways—are generally charged to capital. No uniform policy is pursued, however, as to the items to be so charged. Until recently, the rule has been in Ontario not to charge to capital account the sums spent in the

<sup>1</sup> Mr. Cahan, Nova Scotia House of Assembly Debates, 1894, p. 96.

<sup>2</sup> Hon. Mr. Murray, Nova Scotia House of Assembly Debates, 1910, p. 178.

erection of public buildings, while in Quebec and elsewhere all amounts expended on them,—whether for original construction or for repairs,—have been often times so ascribed. As an offset to its debt of almost fifty millions of dollars, the Province of Ontario at the close of the fiscal year 1915 reported assets on hand in excess of forty-one million dollars. Of this total no less than twenty millions represented the cost of public buildings of all descriptions. In Quebec, just the opposite procedure has been followed.

"I have not included in the Assets, Public Buildings and other property of the Province, as I think it best, for the present, at all events, to include only the assets which are available to meet the established liabilities as set forth in the statement."<sup>1</sup>

As in the case of the Dominion, items of expenditure have been shifted from revenue to capital account or vice versa at the dictation of the ministry. Thus in New Brunswick, the custom had been to defray the cost of erecting small bridges out of current revenue and the amount so expended in 1909 was originally charged to current expenditure. But finding it impossible to have the accounts balance on the right side of the ledger in any other way, the administration obtained a certificate from the provincial engineer, five days before the close of the fiscal year 1909, to the effect that certain of the work performed on these small bridges was permanent in its nature. Instead of being debited as customarily against ordinary revenue, part of this expenditure on small bridges was immediately transferred to a "special permanent bridge account" and the cabinet thereby enabled to report that the provincial budget for the fiscal year just past had shown a surplus.

#### *Capital Expenditures Ignored in Budget*

In the preparation of provincial budget statements, capital expenditures are not taken into consideration. The result is that the various budget presentations through this ignoring of outlays on capital account seldom give either a correct forecast of future or an accurate review of past provincial financing. For example, Nova Scotia's expenditures for the fiscal year ending September 30th, 1914, were originally estimates at \$2,055,893.07. In the budget speech of 1915, the actual provincial expenditures for the year in question were officially stated to have been \$2,098,893.07. Yet the provincial treasury accounts show that the total expendi-

<sup>1</sup>Hon. W. A. Weir, Budget Speech (Quebec), March 19, 1908.

tures were in reality \$2,863,542.81. Capital expenditures in excess of \$700,000 explain the discrepancy. As will be shown in detail further on, this failure to include in the Canadian provincial estimates of intended expenditures on capital account has greatly weakened legislative control over government expenditure.

#### *Fixed and Controllable Expenditures*

Amounts which are expended by virtue of some statute and those which have to be voted annually by parliament are designated as fixed and controllable expenditures. An equivalent American term would be standing and annual appropriations. In the Dominion main estimates, these two classes of expenditures are placed in separate columns so that it is possible for a legislator to tell at a glance the total amount to be appropriated for any government department. In the provincial budgets, however, the prevalent practice is not to include the statutory expenditures in the main estimates, but only such items as are to be voted by the local legislatures.

The drawback of this procedure is that the provincial treasurer's estimates as submitted to the legislative assemblies do not give any full information as to what the total provincial expenditures for any given year are going to be. Take, for example, Ontario's experience in its fiscal year 1914-1915. In accordance with the government's official estimates, the Ontario parliament passed a supply bill carrying appropriations of \$14,578,425.04. Yet the actual provincial expenditures for the fiscal year in question proved to be \$19,439,988.12, of which only \$12,252,680.06 was paid out pursuant to appropriations contained in the supply bill. The statutory expenditures were \$5,777,436.81 and \$1,389,871.25 was paid out by virtue of special warrants.

While not intentionally misleading, the estimates submitted to the provincial parliament gave no inkling of the fact that the items contained in the supply bill would cover only five-eighths of the government's total expenditures. It would be better therefore if the Dominion practice were followed in this particular respect and the fixed and controllable expenditures placed in parallel columns in the estimates for the legislator's guidance and information.

#### *Preparation of Estimates for Submission to Provincial Parliaments*

Besides leaving all fixed expenditures out of the annual estimates submitted to the provincial parliaments, it is becoming more and more the practice not to insert intended expenditures

on capital account in the estimates presented to the houses of assembly. In recent years many of the Canadian provinces have been spending large amounts on the betterment of roads and bridges. As the ordinary revenues were insufficient to provide the funds needed for this improvement work, the local governments caused the provincial legislatures to pass statutes authorizing the borrowing of money to cover the cost of these contemplated expenditures.

"In so far as the policy of building permanent bridges was concerned it was impossible to keep up the public services without following it, and this policy could not be carried on except by borrowing money. The Province had not sufficient revenue to carry on the work any other way."<sup>1</sup>

Nowadays a distinction is being made between capital expenditures sanctioned by the passage of a general legislative act, which are deemed to be in a class by themselves, and appropriations for ordinary government purposes which the houses of assembly are expected to approve.

"It was true, in submitting our estimates for the past few years, we had not submitted in detail some expenditures for which we had legislative authority. The better practice would be when you propose to expend on capital account, even if you had legislative authority, to place your items in detail in your estimates. How the practice [of not inserting them] grew up he did not know."<sup>2</sup>

The result is that these expenditures on capital account are spent without ever having been voted by the committee on ways and means.

"Just now the Government was borrowing a considerable sum of money for the construction of smaller bridges and culverts and what they called the betterment of the highways. . . . The point that he wished to impress upon the House was that the underpinning of this legislature was being slowly but surely undermined by the Government. The fundamental principle of government in this and other English-speaking countries was that the people's representatives held the purse and that the Government was merely a committee for the expenditure of the money that the people's representatives authorized them to expend. Every dollar of expenditure should go through the estimates and be considered in committee of ways and means.

"If honorable members would take the expenditure on capital account made during the last few years, they would find that a large part of the money had been expended by the Government without having ever been considered by the House as such expenditures should be.

"It was true that we had an act on the statute book in regard to the expenditure on culverts and the smaller bridges, and an act authorizing the borrowing of money for the betterment of highways, and another act authorizing the borrowing of money for other public services, but it was a fundamental principle that every appropriation of public money to be a legal appropriation must go through the committee of ways and means. He had raised this question before and he was now raising it again. He was told that we had statutes authorizing the borrowing of money for cer-

<sup>1</sup> Hon. Mr. Clarke, *New Brunswick House of Assembly Debates*, 1915, p. 134.

<sup>2</sup> Hon. Mr. Murray, *Nova Scotia House of Assembly Debates*, 1915, p. 206.

tain purposes, but the point was that those statutes did not authorize the appropriation of the money. Even if the argument from the other side of the House were correct, the statutes in question had never been put through the committee on ways and means. So in one way or another the constitutional provisions for the safeguarding of such expenditures were entirely evaded.

"Now, what was the result? Instead of government by the people, we were gradually building up a system of expenditure by the Governor in Council altogether. For instance, these expenditures on culverts and bridges last year, not \$1.00 of that amount was voted by the House through the committee on ways and means. Two hundred fifty thousand dollars we expended in the fiscal year and since that time. Every dollar of that money was expended by the Government without reference to this House, except the bold authority to borrow the money contained in the act passed a year or two ago. That method of Government was absolutely and completely in defiance of the British North America Act and of the rules of this House. If the proper procedure had been adopted and the government had stated: 'We propose to expend out of borrowed moneys for bridges and culverts \$150,000' the House would go into committee and every honorable member would have the right to know where that money was going to be spent, and also the right to know where every culvert was to be put. . . . The result of the methods of business that has crept into this House during the last four or five years was that we know nothing about the amount, nothing about the localities in which these expenditures were to be made; we did not know whether one dollar or one hundred thousand dollars were to be spent within the current fiscal year. That was not right."<sup>1</sup>

Up to seven years ago the rule in New Brunswick was for the ministry when submitting estimates of proposed expenditures on public improvements to specify what particular work should be undertaken during the coming year. Since 1910, however, these details have been suppressed and only lump sum votes are now asked for.

"In past years when money was asked for permanent bridges the bridges were always named. Nowadays the amount was voted and no one knew how it was going to be spent. The consequence was that the chief commissioner would take the money and use it where he liked and nobody would be any the wiser. He diverted it to whatever purposes he felt inclined."<sup>2</sup>

Concerning the dangers of such a policy, the following citation is in point:

"The danger of permitting the construction of bridges and permanent works to be undertaken on the authority of the Minister alone and without the sanction of the Legislature must be apparent to all. In former times when bills were brought up to permit of this sort of work being done, the names of the proposed bridges and their probable cost were given. Under the present practice the Government comes down to the House with a bill authorizing the expenditure of large sums that they had already spent without any estimate of what the total cost was likely to be. Many big loans had been contracted in this way without the House having any say in the matter until it was too late, and in the interests of the Province he felt it was time the practice was changed. The system was bad enough in itself, but besides that it furnished a great temptation to a minister to spend money which was not needed, except to satisfy his own personal

<sup>1</sup>Mr. Tanner, Nova Scotia House of Assembly Debates, 1915, p. 203.

<sup>2</sup>Mr. Finder, New Brunswick House of Assembly Debates, 1916, p. 93.

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inclinations or the wishes of his friends. It might be that the minister lived in a part of the Province where he thought a bridge would help him with his constituents, and by virtue of the power recently assumed of going to work on his own authority he promptly sets about to build one. When the work is well in hand and no other course is open but to finish it, he comes to the House for money and there is of course no option but to grant it. The same thing might happen next year if another Minister came into office. The result was that many public works which were not actually needed from a public standpoint were carried out solely through sectional influences, and for which had legislative authority been necessary would not have been constructed."<sup>1</sup>

In conclusion, it should be said, however, that the recent New Brunswick policy of not revealing in the estimates what public improvements are to be carried on during the ensuing fiscal year has been defended in ministerial circles on the ground that it does away with the bribing of constituencies.

"The honorable member complained that the Legislature's sanction should be obtained for practically every public work that was to be undertaken. A little consideration would show him that that could not be done. The fact that the late Government sometimes specifically mentioned the names of bridges they proposed to build was no reason why the practice should be continued now. In fact, the late government did it for improper purposes. Whenever the name or locality for a bridge was mentioned in a bill promoted by the late Government, it was done for political purposes and as a bribe."<sup>2</sup>

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<sup>1</sup> Mr. Stewart, New Brunswick House of Assembly Debates, 1915, p. 132.

<sup>2</sup> Hon. Mr. Clarke, New Brunswick House of Assembly Debates, 1915, p. 134.

CHAPTER III  
SUBMISSION OF ESTIMATES AND OF PROPOSED  
CHANGES IN TAX LAWS

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When it comes to the submission of estimates and of proposed changes in existing tax to the provincial parliaments, the same procedure is followed as is observed in the case of the Dominion government. The local legislatures are opened with a speech from the throne delivered by the lieutenant-governor of the province in person in which the general business outlook is reviewed and all the proposed new legislation outlined, which the government desires to have enacted. As a general thing, the estimates are laid before the houses of assembly fairly early in the session. The practice in Nova Scotia is described as follows:

*"The practice in recent years has not been to bring in the estimates in the early part of the session, as a good many things transpire during the session which affect the estimates. Formerly the practice was to bring in the general estimates early, and then to bring in supplementary estimates. That practice has been departed from for a number of years and the custom now is to bring in all the items of anticipated expenditure for the year in one estimate."<sup>1</sup>*

Compared with the Dominion estimates, the provincial estimates of revenue and expenditures are of only secondary importance.

*"Under our system of government, our Provincial budgets and estimates had not the same importance and far reaching consequences to the country as the budget prepared by the Federal parliament. We had no new system of taxation to propound; we did not have to invite the attention of the House to other ways and means to meet the Provincial necessities. . . . As far as this Province was concerned, there was no such thing as Provincial taxation. The revenues were derived without directly affecting the people at all. The only duty devolving upon the persons charged with financial responsibility was to see that the estimates of revenue for the year were prepared upon a safe and sound basis, a basis likely to be realized and to see that expenditure be kept well and safely within the limits of Provincial revenues."<sup>2</sup>*

As the Canadian provinces exercise limited powers of taxation and as their sources of revenue are well defined, provincial estimates seldom contain anything of novelty.

*"In presenting the estimates, it is customary to make a statement of the financial affairs of the Province. While these financial affairs are of the utmost importance, our expenditures have fallen into such well established grooves that we do not look for the estimates to contain any-*

<sup>1</sup>Mr. Fielding, Nova Scotia House of Assembly Debates, 1888, p. 241.

<sup>2</sup>Mr. Longley, Nova Scotia House of Assembly Debates, 1902, p. 185.

thing of a startling character, and our sources of income are so well defined and inelastic that our financial statements are necessarily simple and uniform."<sup>1</sup>

"Most ministers who are charged with the finances of a country are called upon annually to consider a financial policy which will result in the return of such ways and means as will be sufficient to meet the contemplated expenditures of the country, but in this Province the Treasurer has no opportunity for the exercise of any such ability. The Treasurer cannot exercise any ingenuity in looking about him for a measure of increasing the revenue by a new imposition on the public. Nearly all our sources of revenue are definite."<sup>2</sup>

"It is not my duty and I hope it may never be the duty of any future Treasurer to propose a scheme in the shape of a budget. The duty of the Treasurer here is simply to lay information of one year before the House and to make provision for the coming year."<sup>3</sup>

### *The Budget Speech*

While necessarily of lesser significance than the federal financial statements, the provincial budget speeches arouse no small degree of interest.

"The financial statement of the affairs of the Province is a matter of the greatest interest to persons on both sides of the House. It is of interest to the supporters of the Government, because it enables them to judge whether the Government continues to be worthy of their support. It is of interest to the opposition, because it gives them material with which to attack it."<sup>4</sup>

Following the Dominion practice in this particular, the state of the provincial finances is generally reviewed by the local Minister of Finance in one set speech. In Nova Scotia, however, this rule is departed from and the budget is elucidated on two separate occasions as described below.

"In recent years it had been the custom of the government to divide what in a larger arena would be called the budget speech into two separate parts. It was thought better that some explanation of the financial returns should be offered to the House when the returns (public accounts) were laid upon the table, and that, later on, in connection with the estimates, such further statements should be made as might seem necessary. This practice was very convenient as enabling members to obtain a clearer idea of the financial position of the Province than they would otherwise be able to do."<sup>5</sup>

"It was now the custom to divide the financial statement of the year into two parts, the first part taking the form of a brief review which was made in presenting the public accounts, and the second part being an explanation of proposed expenditures which was made in presenting the estimates."<sup>6</sup>

<sup>1</sup> Mr. Fielding, Nova Scotia House of Assembly Debates, 1896, p. 381.

<sup>2</sup> Hon. Adam Crooks, Financial Statement (Ontario), 1873.

<sup>3</sup> Hon. Adam Crooks, Financial Statement (Ontario), 1877.

<sup>4</sup> Hon. Mr. Tweedie, New Brunswick House of Assembly Debates, 1905, p. 54.

<sup>5</sup> Mr. Fielding, Nova Scotia House of Assembly Debates, 1893, p. 135.

<sup>6</sup> *Ibid.*, Nova Scotia House of Assembly Debates, 1895, p. 118.



CHAPTER IV  
CONSIDERATION AND PASSAGE OF APPROPRIATION  
AND REVENUE LAWS

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The procedure followed in the provincial parliament in considering and passing appropriation and revenue laws tallies in almost all respects with the system in vogue in the Dominion house of commons. In all the provinces, the custom is to present the public accounts for the fiscal year last past before the house of assembly begins its consideration of the estimates. As explained in the next citation, any unusual delay in printing these accounts makes a careful scrutiny of the government's expenditure extremely difficult.

"One of the principal duties that members of the House had to discharge was to see that the monies they appropriated were properly expended. The House was only in session for some six or seven weeks and this (Provincial Accounts) report was only placed in the hands of members after four weeks of that time had elapsed. It was utterly impossible under these circumstances for him or for any other member of the House to send out into the country and get information with respect to the expenditure. If he had the whole session before him in which to make inquiries it would be a different matter."<sup>1</sup>

Government expenditures are set out in great detail in the reports of the Dominion and provincial auditor generals.

"At Ottawa everything is sent to the audit office and there compiled and all the accounts are set up in type in the most minute detail and when the volume has grown a foot or so thick it is hurled at the head of members of parliament who receive it with laughter and applause. The Auditor General's blue book and the performance of Black Rod are the two standing jokes of the House of Commons. Not that the Auditor's report does not contain something of value but by the inclusion of so much trivial detail, the publication of millions of figures, and the spreading out of even the most trivial and unnecessary correspondence—all these things have made the report so bulky that it is inevitable that it should strike Parliament as ridiculous. But Parliament has not chosen to interfere. We do not believe that the public accounts committee has even ventured to criticize the abnormal growth of this report. No person can tell how many pages the Auditor's report consists of. Before it was split up into two volumes it was four inches deep paged in sections A B C and exhausted the alphabet with 26 sections."<sup>2</sup>

Yet as it is this very detailed information regarding prices paid and quantities delivered which enables members of the legislature to detect whether the government is being overcharged or not, it might seem to be an unwise economy to present the

<sup>1</sup> Mr. Tanner, *Nova Scotia House of Assembly Debates*, 1907, p. 150.

<sup>2</sup> Hon. Mr. Murray, *Nova Scotia House of Assembly Debates*, 1906, p. 140.

*APPROPRIATION AND REVENUE LAWS*

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public accounts in a more abbreviated form. Everything should be inserted in them which would throw light on the prices paid by the government for its supplies. Unless this is done, the public accounts are valueless. The practice in British Columbia has been to set out at length that certain articles costing so much in the aggregate were purchased from certain parties. But as the quantity of lumber or other merchandise purchased is not given, a proper checking of the government's expenditures, with the aid of public accounts of that kind, is impossible.

CHAPTER V  
EXPENDITURE WITHOUT PARLIAMENTARY  
APPROPRIATION

During the last few years, Canada has been experiencing an era of prosperity. Not only has trade surpassed all past records, but the receipts of both the federal and local governments have reached previously unrecorded totals. As a result of this state of affairs, the estimates of government revenues (except in the case of British Columbia) have been regularly exceeded.

*"In framing the estimates sufficient allowance was not made for continued prosperous condition of the Province and the consequent expansion of business and increase of wealth subject to taxation."<sup>1</sup>*

Thus in the fiscal year 1912-1913, Quebec's ordinary revenue was estimated at about \$6,500,000.00. Its actual revenues proved to be in excess of \$8,000,000. But as the receipts of the various provinces have been mounting, their expenditures have also undergone a marked increase. Part of these additional outlays are due to the popular demand for an enlargement of the services performed by the government.

*"Items of expenditure under every department are increasing. There is scarcely a phase of Provincial administration in which there is not a demand for a greater expenditure of public money. One of the greatest difficulties of carrying on Provincial administration was that of obtaining sufficient revenue to meet what the people consider their reasonable demands."<sup>2</sup>*

Oftentimes, however, provincial expenditures have been increased apparently for the reason that the enlarged revenues have furnished so much additional money which could be spent.

*"The Government since its advent into power in 1908 had been paying out as much as it could spare for this important public service (roads and bridges), and any time when the revenues came in and it was found that there was additional money which could be expended for this service the administration was always glad to give it for this purpose."<sup>3</sup>*

Quebec furnishes as good an illustration as any other province of this tendency for provincial expenditures to keep pace with the growth in provincial receipts. In the fiscal years 1913-1914 and 1914-1915, the Quebec revenues exceeded the budget forecast by \$1,249,515 and \$1,597,165 respectively. During the

<sup>1</sup> Hon. P. S. G. Mackenzie, Financial Statement (Quebec), 1910.

<sup>2</sup> Hon. Dr. Landry, New Brunswick House of Assembly Debates, 1915, p. 55.

<sup>3</sup> Hon. Dr. Landry, New Brunswick House of Assembly Debates, 1915, p. 55.

*EXPENDITURE WITHOUT APPROPRIATION*

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same two years, the actual expenditures exceeded the estimates by \$1,198,164 and \$1,577,725. In all the provinces, the major part of these over-expenditures are incurred through the use of special or governor's warrants. As in the case of the Dominion, it is not a violation of constitutional practice and usage for a provincial government to spend money in certain cases without the authority of parliament. The provincial practice in this regard has been aptly described as follows:

"Suppose we made an estimate and exceeded it, and desire to have more money we would do in such a case what is done by the Government at Ottawa. Representations of the fact would be made by the department in whose custody the matter might be and on those representations the Governor-in-Council would issue a warrant for the amount required. . . . In many cases we do by order in council what under the change proposed would be done by a statute. In the case of criminal prosecutions the attorney general is bound to see that the persons who conduct the prosecutions are paid. In that case we have a statute, and in many cases where over expenditures occur it is by reason of some statute."<sup>1</sup>

The power granted the provincial governments of issuing special warrants makes it a comparatively simple matter to exceed the estimated expenditures in any given year. The usual procedure followed is for the provincial treasurer or some other minister to report to the executive council,<sup>2</sup> or in other words to the lieutenant-governor and the cabinet, that the sums appropriated by the legislature for certain services for the current fiscal year are insufficient to meet the requirements of such services and that certain additional appropriations will be needed. On the receipt of this report, the executive council issues the necessary order placing additional sums at the disposal of the department whose funds have all been spent. In this way, exhausted appropriations are replenished and the instructions of the legislature that only a certain amount be spent for the maintenance of certain government services set at naught.

If, however, it be desired to spend some of the public funds for some object for which the legislature has made no provision, such new expenditure is authorized on the ground that it is "urgently and immediately required for the public good." Thus since the outbreak of the European War, certain of the Canadian provinces have made patriotic gifts generally in the shape of food supplies to the English government and for the relief of the Belgian people. These expenditures amounting to many millions of dollars in the aggregate have been made at the direction of

<sup>1</sup> Mr. Fielding, Nova Scotia House of Assembly Debates, 1892, p. 12.

<sup>2</sup> For form of report and Order-in-Council, see Appendix V.

the ministry and without obtaining the express consent of the legislature thereto beforehand. A form of special warrant issued when one of these gifts to the Motherland was determined upon is given below:

## SPECIAL WARRANT

To the Honourable the Provincial Secretary-Treasurer of the Province of New Brunswick:

The Lieutenant Governor-in-Council having decided to make a contribution of one hundred thousand bushels of potatoes for the Government of Great Britain at an estimated cost of seventy-five thousand (\$75,000.00) dollars, for the use of the Army and Navy, as a token of the loyalty of the people of this Province to the Motherland, and there being no legislative provision for the expenditure involved in said contribution, and the same being urgently and immediately required for the public good, and an Order-in-Council having been made by the Committee of the Executive Council pursuant to the provisions of Chapter 25, subsection (b), Section 17 (Page A20) of the Acts of the Legislative Assembly 8 Edward VII, you are hereby authorized to issue the said sum of seventy-five thousand (\$75,000.00) dollars, so required as aforesaid, which said amount shall be placed by you to a special account against which a cheque or cheques may issue as required, for payment of the amount required to defray the expense of the purchase and transportation of the said contribution, and for no other purpose whatever.

Dated the second day of September A. D. 1914.

(Signed)

JOSHUA WOOD,  
Lieutenant Governor.

The amount expended under authority of special warrants is, of course, recited in the public accounts. If it so desires, the house of assembly can express its opinion in regard to them.

"I notice that the Treasurer has not put into his estimate the amount of special warrants issued last year, some \$180,000 more than this House voted. If he considers this amount does not require the sanction of this House, he labors under a mistake. It might be very convenient for the Government not to have to apply to the House for authority to spend money for any purpose, but that is not the system under our constitution and the House has a right to express its opinion on the special warrants, not only of last year, but of the present year, as upon any amount asked for in the estimates."<sup>1</sup>

But even if the opposition should be able to show convincingly that the government were not justified in swelling the expenditures beyond the budgetary estimates by the issuance of special warrants, such strictures rarely produce any effective results. Any reflection on the government is treated as a vote of confidence and voted down by its supporters. The only real check on these over expenditures by special warrants is the danger of the administration losing office if matters are carried too far.

"If the Government have expended money improperly Parliament has then only one remedy—that is to tell the Government to get out, and

<sup>1</sup>Hon. Mr. Robertson, Quebec Budget Debates, 1883.

**EXPENDITURE WITHOUT APPROPRIATION**

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that is the remedy which this Parliament has and the people of Nova Scotia have."<sup>1</sup>

While admittedly an infringement on parliamentary control of public expenditures, the Canadian viewpoint is that government affairs could not be carried on nearly so effectively unless the executive departments possess the right to resort to the public funds without having to appeal directly to parliament.

"The drawing of that (special) warrant would be as much a violation of the control of Parliament as anything else can be. If the desire is to have every dollar that is expended voted by this House, I have to say that that is not the system that prevails anywhere. You could not carry on government in that way. The Government must have a discretion and the power to exercise it in the light of their responsibility to the people and the legislature. The knowledge that every dollar must be accounted for and every voucher submitted to enable the people to know how the money has been expended is surely a large measure of protection."<sup>2</sup>

Like the Dominion practice, the provincial special warrants are only issued when parliament is not in session. The objections of their employment are that they do away with all effective control of government expenditures and have resulted in Canadian provincial budgets affording no correct criterion, like those of other countries, of what the public expenditures will be in any given year. For instance, in 1913-14, which turned out to be a banner financial year in which the receipts largely exceeded the official estimates, Quebec's actual expenditures were no less than 21 per cent more than the expenditures authorized by the local parliament.

<sup>1</sup> Mr. Fielding, Nova Scotia House of Assembly Debates, 1892, p. 12.

<sup>2</sup> Mr. Fielding, Nova Scotia House of Assembly Debates, 1892, p. 12.

## CHAPTER VI

### CONTROL OVER EXECUTIVE DISBURSEMENTS

Following at varying intervals the example set by the Dominion in 1878, all the Canadian provinces have appointed auditors to oversee the expenditures of the government. In many respects the functions of these auditors are similar to those of the Dominion auditor général. They must examine and certify as to the correctness of the public accounts and see to it that the expenditures made were actually authorized by the legislature and that no sums were paid out in excess of the amount appropriated. Furthermore, they are expected to ascertain whether the prices paid by the authorities were according to contract and were fair and just, and that proper vouchers for all payments are turned in. Finally, they are required to countersign all government checks, to make monthly reports to the different departments as to the amounts already expended under their several appropriations, as well as the balance still available, and to report to the provincial legislatures concerning any expenditures which were made without their certification.

In Quebec, the letter of credit system is in vogue. No money warrant can be issued in that province except upon a certificate of the auditor that legislative authority exists for the expenditure. In addition, the auditor is required to sign all recommendations for the issuance of these money warrants, as well as all checks issued by the treasury department under authority of warrants or of special warrants issued at the direction of the lieutenant-governor in council. As soon as the auditor and assistant treasurer have respectively certified that the desired amount is within the existing legislative appropriation and is available, a warrant is issued, signed either by the lieutenant-governor or one of his deputies, and drawn upon the provincial treasurer, whose department at once places the specified amount to the credit of the particular service mentioned in the money warrant. When this amount is expended, the department must apply for a new credit and the procedure just outlined is repeated.

In the case of special warrants to cover unforeseen expenditures, these are issued at the pleasure of the lieutenant-governor

in council upon the presentation of a report from the provincial treasurer that no legislative provision exists for the contemplated expenditure and upon a further certificate from the minister in charge of the branch affected that there is urgent necessity for such outlay.

The Quebec statute concerning special warrants, which is typical of all the others, reads as follows:

"If, when the Legislature is not in session any accident happens to a public building which requires an immediate outlay for the repair thereof, or if any other occasion arises when any expenditure not foreseen or provided for by the Legislature, is urgently and immediately required for the public good, upon the report of the Treasurer that there is no legislative provision, and of the minister having the charge of the particular branch of the service that the necessity is urgent, the Lieutenant-Governor in Council may order a special warrant to be prepared for the issuing of the amount to be required."<sup>1</sup>

Most of the Canadian provinces, however, have adopted the direct payment system. For instance, in Ontario when a claim is presented to the government for settlement, a clerk of the department concerned prepares a voucher covering the amount involved. The deputy head of the department then stamps this voucher, which thereupon is sent to the provincial auditor. If he approves of the account, the voucher is sent to the office of the provincial treasurer, who issues the requisite check. This in turn is countersigned by the auditor and then delivered to the payee.

The difference between these two methods of payment is that under the letter of credit system the auditor examines the correctness of an account after payment is made. In the other case, he makes his investigations before payment takes place. The results of a pre-payment inquiry are described in the next citation:

We provided by a statute that when bridges were built which cost a certain amount, the Government would contribute 15 per cent of their cost. The Auditor-General deemed it his duty to ascertain whether the statement of cost was a cooked one. The Government thought that in doing so he exceeded his duty, but he refused to accept that view, and, after some time, he succeeded in having an investigation. What was the result? It was found that the very account to which he objected was made up so as to show that the bridge cost a great deal more than it actually did, and, had he passed the demand for payment, very many thousands of dollars would have been paid over to which they were not entitled. There is an evidence that the Auditor-General is right in the stand he takes. The Government contended that he had no business to inquire into the details, and had the Auditor-General submitted to that contention, the country would have been mulcted in a considerable sum."<sup>2</sup>

<sup>1</sup> Revised Statute of Quebec (1909), Section 859.

<sup>2</sup> Mr. Sproule, Canadian Hansard, 1904, p. 6600.



Among the provincial auditors the belief prevails that a careful scanning of accounts before the checks for the payment of the same are drawn greatly reduces the chances of defrauding the government. Under the other plan, a fraudulent overcharge is not brought to light until after the expenditure has been made and it is not always an easy matter to recover funds which have once been paid out. On the other hand, the Dominion officials claim that their method of past audit brings to light many overcharges and irregularities which a preliminary investigation before payment would never have revealed. Because of the long delay involved, it would be impossible for the Dominion auditor-general—so long as his office remains as now constituted,—to inquire closely into the correctness of accounts in advance of payment.

Imitating the Dominion's procedure, the provinces have established treasury boards or committees of the ministry to pass upon questions in dispute between the provincial auditor and the head of a department. These boards generally consist of three members—of which the attorney-general or legal adviser of the government is usually one—and have the power to either sustain or overrule the auditor's decision. As a rule, clashes between the provincial auditors and treasury boards are infrequent.

While a provincial auditor cannot be removed except upon charges, it is within the power of the local governments to impair his usefulness by cutting down the scope of his authority. This is what recently occurred in Ontario. In this case, the auditor as in duty bound called the attention of the legislature to the fact that the Ontario hydro-electric commission was required by law to turn over to the provincial treasurer all sums collected by it from the municipalities for the sale of electric power. Instead of complying with the terms of the statute, however, the commission had only paid in \$1,333,121 of the \$5,485,463 collected by it. The balance of \$4,152,341 had been spent in contravention of the law on new construction. As the auditor's report necessarily reflected on the business methods of the administration, the government promptly had a bill passed withdrawing all the accounts of the hydro-electric commission from the provincial-auditor's jurisdiction and appointing a comptroller of its own choosing to supervise the commission's expenditures. This episode affords another illustration of the increasing unwillingness of all Canadian governments to have their expenditures subject to parliamentary or other revision and control.

CONTROL OVER EXECUTIVE DISBURSEMENTS

*Provincial Public Accounts Committees*

As will be seen from the subjoined table, these committees vary greatly in size:

NAME OF PROVINCE	MEMBERSHIP HOUSE OF ASSEMBLY	MEMBERSHIP PUB. ACCTS. COM.
Ontario .....	111	41
Quebec .....	81	38
Manitoba .....	49	21
Nova Scotia .....	38	18
Alberta .....	56	11
Saskatchewan .....	54	11
New Brunswick .....	48	7
Prince Edward Island .....	30	7
British Columbia .....	47	3

The membership of these committees is subject to change from time to time. Where the committee is large, as in Ontario, its membership is divided according to the strength of the two parties in the house of assembly. Thus, if the opposition held one-third of the seats in the house, only one-third of the membership of the public accounts committee would be allotted to it. If the committee is composed of a small number, the places on it are sometimes divided between the supporters of the administration and their opponents in a fixed ratio. In Prince Edward Island and New Brunswick, for example, the rule is to assign five out of the seven places on the committee to the government side and the remaining two to followers of the opposition. In every case, the government controls the committee by a comfortable majority. In Quebec, the provincial treasurer recently acted as chairman of the committee and he would seem to be the minister most logically entitled and probably the best qualified to hold this position.

The difficulty of obtaining a quorum is the reason given why the public accounts committees in certain of the provinces have been constituted with such a large membership. In Ontario, only seven out of a total membership of forty-one need be present in order to form a quorum. Yet, despite the small number required, it is frequently no easy task to have enough members on hand to enable a meeting of the committee to be held. The number of committee meetings varies from year to year and depends on various factors. In 1908, the Prince Edward Island

public accounts committee had two sessions of less than an hour each. The committee had adjourned subject to the call of its chairman, who did not see fit to call the committee in session again. In this way, the committee was prevented from performing its duties. This could not happen if provision was made for holding committee meetings at stated times. In Ontario, the public accounts committee does not meet until after the budget speech has been delivered.

As in the case of the Dominion committee, the provincial public accounts committees devote more time to arguing than to actual investigation and accomplish very little. How proposed investigations are blocked is described in the two passages next cited.

- "Your Committee has been greatly hampered in its work by the improper exclusion of important and directly relevant evidence, the disappearance of necessary and material witnesses in the employ of the Government, the non-production of important and necessary and original records, and the mutilation of one of the most important books of original entry."

"Mr. Arthur Newberry, Assistant Provincial Secretary, was called and examined. When questioned as to the time of the receipt of the additional subsidy, he stated that he knew the time of its receipt but could not give the information to the Committee without the consent of the Premier. He was permitted to leave the Committee for the purpose of asking for such consent, and a short time afterwards returned and stated that the Premier had instructed him not to give the information. Mr. Balderston, the Auditor, was also examined upon this matter but refused to give any definite answer, saying that he could not tell, that he was not quite sure when it was received.

"Mr. Newberry was next examined as to the receipts and expenditures from 30th September to 31st December. He stated that he had the information prepared, but could not furnish it to the Committee without the Premier's consent. He was again permitted by the Committee to consult the Premier and again returned stating that the Premier had instructed him to refuse to give the information.

"The Committee adjourned to meet again on the 24th of March, but no subsequent meeting was held, and your Committee found that it was useless to proceed further with any inquiry in view of the Premier's action above referred to, and of the ruling that witnesses could not be examined under oath."

The inability to examine witnesses under oath often times prevents the committee from ascertaining the time facts of a transaction. Hence, it can seldom arrive at a definite conclusion. In Ontario, the custom is merely to report the testimony taken before the committee to the house of assembly without comment or recommendation. Should a report be presented to the house in the other provinces, it usually consists of a majority and a minority report for the committee members rarely agree as to the deductions to be drawn from any given testimony.

<sup>1</sup> Minority Report, Pub. Accts. Com., Manitoba Legislative Journal, 1915, p. 182.

<sup>2</sup> Minority Report, Pub. Accts. Com., Prince Edward Island Journal, 1908, p. 43.

In 1906, the opposition members of the Prince Edward Island public accounts committee vainly recommended that "members of this Committee having an interest in matters under investigation should not preside over or take part in the deliberations of such Committee in respect of such matters." It is not deemed improper in Canada, however, for those interested in the suppression of an inquiry before the committee to sit in judgment on their own case.

On account of their partisan composition, the provincial public accounts committees are not qualified to pass upon the question whether a local treasury board was justified, or not in overruling the action of a provincial auditor. As explained in the next passage, the members of the opposition being in a minority are never able to put through any recommendation, which even impliedly reflects on the government. Indeed, as these committees are not judicial or impartial bodies, it would be a waste of time for them to attempt to review the overrulings of the various treasury boards.

"The Prime Minister says: But all the Auditor-General's statements have been made before Parliament and there is no record of Parliament having supported the Auditor-General as against the Government. These things have gone before the Public Accounts Committee and there is no record of the Public Accounts Committee having expressed itself in favor of the Auditor-General's opinion when that opinion clashed with the opinion of the Government. Such a statement is all right in theory; but it does not amount to very much in practice. The Prime Minister knows that the Public Accounts Committee is not disposed at any time to revise the Government's decision. . . . This takes away largely from the force of the contention; Oh, it must be all right because the Public Accounts Committee and the House of Commons agree with the contention of the Government. The Oppositions are here to criticize, but of course it is impossible to carry resolutions against majorities that stand with the Government."<sup>1</sup>

Until a different conception prevails, however, regarding their functions, the local Canadian public accounts committees will continue to have only a limited sphere of activity.

<sup>1</sup> Mr. Foster, *Canadian Hansard*, 1905, p. 9634.

CHAPTER VII  
PARTISAN USAGES AND PRACTICES

Although not appearing in so acute a form, the same political evils which affect the workings of the Dominion budget system also occur in connection with the various provincial governments. With the exception of British Columbia, none of the provinces has introduced a civil service reform law as yet and appointments to official positions are still governed by political considerations. Provincial patronage lists are also not unknown. The use of such lists has been termed a breach of trust.

"We had in this Province the vicious patronage list, which destroyed good wholesome commercial competition. It led to a breach of trust on the part of those responsible for the administration of public affairs. If the Board of Directors of a commercial institution such as a bank were to make a preferred list, take a certain number of their shareholders, treat them differently from others, give privileges to those who supported them in their election to office, it would undoubtedly be regarded as a breach of trust."<sup>1</sup>

When the confederation was first formed, certain local public improvements were undertaken by the provinces. In the course of time, however, the federal government has taken over these former duties of the provinces and now carries out all public improvements of a certain category no matter how small the expenditure involved may be.

"There was a time when the public works line was well defined. There was a time when the Fathers of Confederation and those who worked after them knew what the line was, where public works were performed by the Dominion, and where they were held over for the Provinces. That line is absolutely obliterated, and to-day this Dominion Government does its public work service on the smallest rivers in any Provinces of the Dominion and even goes so far as to build bridges and the likes of that."<sup>2</sup>

As a result of this encroachment by the Dominion government on the original field of activity of the provinces, the only public improvements now undertaken by the local governments are the construction and betterment of roads and bridges and the erection of public buildings for provincial purposes. Hence the opportunities for wasteful and unproductive expenditures are somewhat circumscribed. Nevertheless, even if on a smaller scale, the same unwarranted and improvident expenditure of public funds to further party interests is to be found as in the case of the Dominion. Road and bridge moneys are frequently disbursed in

<sup>1</sup> Mr. Wilcox, Nova Scotia House of Assembly Debates, 1908, p. 568.

<sup>2</sup> Mr. Foster, Canadian Hansard, 1906-07, p. 5319.

such a way as to aid the government side at election time. For example, the minority report of the Manitoba public accounts committee for 1911 called attention to the manner in which public money was spent on road improvements on the eve of the last general election. The intention was manifest to influence the elections in the interest of the government candidates. Between June 1st and July 11th, 1910, when the general election took place, \$150,000 of the provincial funds were paid out for work done on the public roads. After that date, however, only a very small further expenditure was found necessary to keep the roads in order. Nor is this by any means an isolated instance. In another case, when a general election occurred in Nova Scotia during the early winter, road work was started on a large scale in November although the ground was covered with from 6 to 8 inches of snow at the time.

In the provinces public works patronage is often used as a means of providing a political campaign fund for the party in power. Thus in Manitoba, the officials of the administration preceding the present one in office entered into supplementary contracts for the construction of the new provincial parliament building previous to a general election, which new contracts greatly enhanced the profits of the contractors. In return the contractors made large contributions to the campaign fund of the government party. In the case of the construction of the Battleford Asylum in Saskatchewan, the contractors were allowed to substitute cheaper materials than specified in nearly two hundred items practically without any deductions being made from the contract price. On these minor substitutions the contractors were enabled to make from \$50 to \$5,000 excess profits. Most of the arrangements for these substitutions were completed just before the provincial election of 1912 and the supposition is strong that campaign fund contributions were exacted in return. That such practices at the expense of the taxpayers should be connived at and that a former provincial premier, while in office, should have openly defended bribery on the ground that it is necessary "to grease the palm of an Indian" at times indicates a low standard of political morality in the Dominion. In the words of a prominent member of parliament:

"I realise it to be too true that in Canada the public sense respecting Government expenditures is not so delicately and correctly adjusted as it should be, and it frequently appears but like the voice of one crying in the wilderness to protest."<sup>1</sup>

<sup>1</sup> Mr. A. K. Maclean, *Canadian Hansard*, 1916, p. 352.

## CHAPTER VIII

### PROVINCIAL FINANCIAL HISTORY

Corresponding to the dissimilarity in their natural resources, the Canadian provinces have displayed a considerable divergence in their financial policies and obtain their necessary revenue in different ways. The subsidies received from the Dominion government are the most important source of income. At the present time, these aggregate \$11,500,000 per year or approximately one-third of the total yearly expenditures of the provinces. The other available ways of raising revenue, however, would supply the provinces with sufficient funds to carry on their respective governments even though the Dominion subsidies should be entirely done away with. As the following extract points out, the federal and local governments have each a distinctive field of taxation.

"There is a marked difference between the Dominion and the Provinces as regards resources. Direct taxation is one of the sources which local governments have for revenue and for replenishing their treasury, but it is not the only one. There are resources within the Provinces themselves in the franchises of the different Provinces—franchises of great value. These have been differently treated by different Provinces and differently treated in the same Province under different Governmental management. Take, for instance, the Province of Ontario. Up to the time the present Conservative government came into power certain classes of franchises, most valuable in themselves were treated differently from what they are to-day. These include mines, wood-pulp preserves, water-power franchises and the like. The Province of Ontario, in a little district up in its Northern Territory, actually makes out of its use of the public franchises millions of dollars per year, whilst in other Provinces these resources are not husbanded, but are given away for a song. Scattered all over each Province are valuable assets over which the Dominion Government has no control and from which it cannot get a farthing. The Provincial Governments have full powers over these and could get from them a large accretion to their revenue like Ontario. It is a mistake to think that all elasticity of revenue is in the Dominion and little in the Provincial power. The power of the Dominion is bounded and limited, while that of the Provinces is almost unlimited. The Dominion can impose excise taxes and customs duties and obtain also a revenue from Dominion lands and minerals. But excise and customs duties cannot be made indefinitely large. The Provinces have mines, fisheries, timber, silver, gold, copper and coal areas which, if profitably husbanded, are most profitable sources of taxation and income. The Provinces also have the income tax and the succession tax."<sup>1</sup>

While all the provinces have introduced succession or inheritance taxes, British Columbia is the only one which has a pro-

<sup>1</sup> Mr. Foster, *Canadian Hansard*, 1906-07, p. 5314.

vincial income tax. Direct taxation in any form is unpopular in Canada, and British Columbia and Prince Edward Island were the only provinces which had resorted to this method of raising revenue previous to the European war. The four older provinces—namely, Ontario, Quebec, Nova Scotia and New Brunswick—divide a large revenue from crown lands, mines and forests. In the case of Manitoba, British Columbia, Prince Edward Island, Alberta and Saskatchewan, which joined the Dominion subsequent to confederation, title to all public land within their confines is vested in the Dominion government. In order to place them on an equality with the four original provinces of Ontario, Quebec, Nova Scotia and New Brunswick, all of which entered the confederation possessing large tracts of public lands, the Federal government makes certain annual grants to the five newer provinces in lieu of public lands. All the provinces derive large revenues from succession duties (inheritance taxes), corporation taxes, licenses and stamp duties.

Civil government, administration of justice, and the maintenance of the legislature are the three government services which the provinces must make provision for. All of them go much further than this, however, and contribute large amounts for the furtherance of education, the improvement of agriculture and the maintenance of hospitals and other public institutions. As will be pointed out later on, certain of the provinces have proceeded even still further and have assumed the responsibility of keeping up the local roads and bridges. With these preliminary observations, the financial history of the individual provinces will now be taken up in detail.



## PROVINCE OF ONTARIO

After confederation became an accomplished fact, the financial position of Ontario underwent a great improvement. The revenues of the province under the Union had been estimated at \$1,831,000. The subsidy to be received from the Dominion government was to supply \$1,196,000 of this amount and the balance of \$635,000 was to come from outside sources. It soon appeared, however, that the provincial receipts had been underestimated. In place of merely paying its expenses as had been anticipated, the crown lands department showed an annual surplus of \$500,000 and more. As the actual only slightly exceeded the estimated expenditure, the province found itself in receipt of a surplus income every year of one million dollars. So rapidly did this surplus mount that the government felt obliged to distribute \$3,388,068 of it as a direct gift to the municipalities in 1873. In addition, three millions or so more were spent in the construction of local railways.

*Ontario Free From Debt until 1905*

This happy condition of affairs, where receipts more than counter-balanced expenditures, lasted in Ontario for nearly forty years. Up to 1905, the province remained virtually free from debt. With the exception of the revenues derived from the crown lands, the receipts of the province were subject to little fluctuation.

"There is one item in our receipts, which at a glance at the public accounts of past years will show is very variable. That is the receipts from Crown Lands, Woods and Forests. The main sources of our revenue are not so dependent upon the general business prosperity of the country as are those of the Dominion Government, which are, to a large extent, but a percentage upon the business transactions of the country. Our Crown Land revenue is of a like character and subject to the same influences. In times of prosperity, collections are more easily made and payments more prompt."<sup>1</sup>

With comparatively stable receipts, except from the source just mentioned, budget making in Ontario during this early period presented few difficulties. A wise policy of paying-as-you-go was pursued by the provincial administration, an equilibrium was carefully preserved between revenue and expenditures and all public improvements and buildings paid for out of current revenue.

<sup>1</sup> Hon. G. W. Ross, Ontario Financial Statement, 1884.

"Our new Parliament building, our Asylum buildings, our Public Works have all been paid for out of current yearly revenue and without borrowing a dollar."<sup>1</sup>

In addition, public affairs were conducted with more economy than in the other provinces which had originally joined the Union. Between 1873 and 1902, the ordinary government expenditure increased 40 per cent in Ontario as against 56 per cent in New Brunswick, 78 in Nova Scotia and 160 in Quebec. At the same time, the people of Ontario kept down the expenditures of their central government by taxing themselves locally for services which elsewhere the provincial administration was expected to carry on. Thus, in the fiscal year 1870-1871, the province of Ontario spent only four cents per head of population on roads and bridges as contrasted with fifty-five cents by the local government in Nova Scotia. Similarly, Ontario spent twenty-four cents per head out of provincial funds for education as against forty-seven cents per head expended in New Brunswick. In the same year, local and provincial expenditures combined, amounted to \$4.01 in Ontario as against \$2.09, \$1.83 and \$1.51 in Quebec, Nova Scotia and New Brunswick, respectively.

Unlike conditions in Quebec and the maritime provinces, however, the care of the insane has been entirely assumed by the central government in Ontario.

"We in Ontario, because our revenue enabled us to do so, have maintained these lunatics at the whole cost of the Province. Quebec throws the cost of the maintenance of lunatics upon the municipalities from whence they come and the same is true of Nova Scotia."<sup>2</sup>

As in the case of expenditures upon local improvements, the Ontario municipalities assumed the lion's share of the subsidies granted to the various local railways. Between the date of confederation and 1913, Ontario's railway mileage grew over seven fold or from 1447 to 11,050 miles. In order to obtain this railway development, the people of Ontario provided a total of \$21,702,594 in subsidies. Of this amount, the municipalities furnished a total of \$12,782,798 and the Province of Ontario \$8,919,796. The aid extended by the province consisted usually of a cash subsidy at the rate of \$3,000 a mile. But instead of paying such cash subsidy outright, the government issued 40 railway certificates of \$140 each, or \$5,600 in all, payable at the rate of one per year for the next forty years. It was contended that these railway certificates liabilities did not constitute a pub-

<sup>1</sup> Hon. G. W. Ross, Financial Statement, Ontario, 1898.

<sup>2</sup> Hon. A. M. Ross, Financial Statement, Ontario, 1885.

lic debt of the province in the ordinary accepted sense, but were more in the category of necessary appropriations of annual occurrence like the yearly grants for educational purposes. Whenever the state of the provincial finances permitted—as was generally the case in the early period of Ontario's history—these certificates were retired as they fell due out of current revenues. When such retirement proved impossible, however, in any given year, the railway certificates were paid off from the proceeds of the sale of so-called forty-year annuity certificates.

#### *Policy Regarding Timber Lands in Ontario*

In the disposal of its timber lands, Ontario pursued a very wise policy from the outset of the confederation. While the Dominion was alienating its timber holdings in perpetuity to partisans of the Ottawa government at certain fixed rates, the Ontario authorities sold the timber cutting rights on the crown forest lands at public auction for limited terms of years only. The success of this policy is evidenced by the fact that during the first four years after confederation took effect, no less than \$380 a square mile was realized from such timber sales. By 1892, the average price attained had reached \$3,657 a square mile.

Following Quebec's lead, Ontario added to its sources of revenue by enacting succession duties or inheritance taxes in 1892 and by introducing certain new kinds of corporation taxes in 1899. With the passage of these additional tax laws, the receipts of the province lost much of their fixed and inelastic quality and began to show greater fluctuations from year to year. In the first thirty-two years of its history, nearly one-half of the total revenues of Ontario came in the shape of subsidies from the Dominion, one-third were derived from crown lands and the balance was made up of the proceeds of liquor licenses, succession duties and various miscellaneous receipts.

Practically from the very start, the provinces of Quebec and Ontario, with their respective French-Canadian and English speaking populations, have been opposed politically. Between 1867 and 1896, Quebec was a stronghold of the Conservative party, while Ontario was equally steadfast in its support of the Liberal side. In 1896, however, the Liberal party permanently obtained the upper hand in Quebec with the result that Ontario began to veer towards the Conservatives, who in 1904 obtained control of the provincial government.

*Change in Policy with Change in Party Control*

This change of party in Ontario was marked also by a complete break with former fiscal methods and the adoption of an entirely new financial policy. The former administration believed in limiting the sphere of government activity and in not allowing the provincial expenditures to exceed the income. At the close of their long lease of power, Ontario had no indebtedness worth mentioning. The Conservative officials now in office, however, have aimed to enlarge the field of state activity as much as possible and have proclaimed as their ultimate end government ownership and operation of various public utilities.

The construction of a government railway line into Northern Ontario at a cost of twenty million dollars constituted the first step in this direction. As this railway system has never met its fixed charges, the provincial government has had to make good the deficit each year. In 1909, a hydro-electric power commission was appointed to build provincial hydro-electric plants and transmission lines and to furnish municipalities and private consumers with cheap electric power. While Ontario possesses great forest wealth and an almost illimitable supply of pulpwood and other valuable timber, no coal deposits are to be found within its borders. As compensation for this lack of a cheap fuel supply, the water powers of Ontario have been estimated at 7,231,787 horse power. The Niagara district alone is capable of furnishing 3,000,000 horse power. The policy pursued has been for the province to issue its own securities for the construction of necessary electrical lines and equipment, while the municipal corporations taking the hydro-electric service must pay an annual sum sufficient to form in thirty years a sinking fund for the retirement of the securities issued by Ontario to provide the required service.

The hydro-electric commission is also seeking permission to build a network of so-called "radio-electric" lines to improve the transportation facilities of the rural districts, which are to assume the entire burden of financing such lines. Had it not been for the European War, this last-mentioned plan would probably have already been in course of fulfillment. It is too early as yet to be able to predict how Ontario's experiment with government ownership and management of public utilities will turn out. In striking contrast with the complete legislative control possible over the expenditure of the executive departments, the outlays of the Ontario hydro-electric commission are not subject to even the semblance of legislative oversight. That this absence of

control leads to bookkeeping methods that are open to criticism has been mentioned in connection with the statement that the commission had expended \$4,190,620 on new construction which it appears should have been paid into the provincial treasury.

Whether the work of Ontario's hydro-electric commission will have a successful outcome or not on its financial side depends entirely on the various municipalities living up to the terms of their contracts for power. In this connection, it may be well to recall the disastrous outcome of the municipal loan acts of 1852 and 1854, which enabled municipalities within the confines of the present provinces of Ontario and Quebec to borrow money for local improvements on the credit of the provincial governments. Of the \$7,300,000 borrowed in all by the Ontario municipalities, less than three-eighths was ever repaid. In most cases, it was not the lack of ability but the absence of all desire to pay, which led the municipalities to default. In the fall of 1916, no less than one hundred and ten municipalities were obtaining electric light and power from the Ontario hydro-electric power commission under the thirty-year repayment plan described above, so that the risk of loss is quite widely distributed.

• *Plan to Spend Liberally for Highways*

In conformity with the good-roads movement started in the United States, Ontario is contemplating spending large amounts in the future upon the development and betterment of roads and highways. Like the rest of Canada, the province lacks good roads.

"Of the 55,000 miles of highway in the Province of Ontario, only a shade more than 4 per cent are surfaced with broken stone, while 33,000 miles of highway are made only of earth and sand, described by a correspondent of the Highway Commission as 'fair weather roads which you cannot use in spring or fall when most needed.'"<sup>1</sup>

Under the plan proposed by the commissioner of highways, the province and the various counties are to assume each two-fifths of the total cost involved and the municipalities one-fifth. In 1912, a special appropriation of \$5,000,000 was passed for the construction of new roads in the sparsely settled districts of Northern Ontario and the amount directed to be spent under orders to be issued by the lieutenant-governor-in-council.

As a consequence of the greater expenses entailed by the European War, Ontario in 1915 imposed as a war emergency measure, a small direct tax for the first time in its history. The

<sup>1</sup> Moore, Wm. H., *Railway Nationalisation*, Toronto, 1917.

legislature has not attempted to determine how the proceeds of this direct tax—which amounts to one mill on every dollar of ratable property and which is expected to yield nearly four millions of dollars—shall be spent, but has left it to the administration to decide how the same shall be distributed for war relief purposes. Now that direct taxation has been once introduced, it is possible that it will be retained as a source of provincial revenue even after the European War has come to an end.

*Revenues and Expenditures*

Indicative of the great prosperity of the province, Ontario's revenues have of late years shown a remarkable growth. In the decennial period 1905-1915, the provincial receipts from ordinary sources were \$98,571,214 as contrasted with \$45,162,473 in the ten years 1896-1905 immediately preceding. Despite this doubling of income, the expenditures have more than kept pace with this augmentation in receipts. In 1905, the so-called direct assets of the province were reported to be over one million dollars in excess of its total outstanding debt. A similar tabulation prepared in 1915, showed the direct assets to be at that date eight million dollars less than the net provincial debt or a change for the worse of over nine million dollars during the period covered. At the close of the fiscal year 1915, the direct liabilities of the province figured \$49,389,366, and its indirect liabilities—chiefly guarantees of railway bonds—\$10,345,849 more.

During the same fiscal year, the principal receipts of the province were derived from the following sources:

Dominion Subsidy .....	\$2,396,378
Lands, Forests and Mines .....	2,021,989
Corporation Tax .....	1,831,311
Succession Duties .....	1,721,167
War (Direct) Tax .....	1,346,478

The main items of expenditure group themselves in this order:

Public Buildings .....	\$3,283,234
Education .....	2,067,448
Public Institutions .....	1,389,932
War Gifts .....	1,346,478
Agriculture .....	685,970

Despite war conditions, ordinary expenditures were not expected to exceed ordinary revenues according to the latest budget forecast.

## PROVINCE OF QUEBEC

When the confederation took effect in 1867, the yearly revenues of the newly formed Province of Quebec were estimated at \$1,417,582. More than one-half of this amount was to come from the Dominion, whose subsidy to Quebec had been fixed by the Act of Union at \$888,888. This anticipatory calculation of revenue proved to be correct and, as the affairs of the province were economically administered at first, a comfortable surplus of receipts over expenditures was achieved each year. This state of affairs continued until the fiscal year 1874-75 when a new policy of lavish railway subventions was embarked upon.

Unlike Ontario, whose comparatively flat surface offers no great obstacles to the building of steam transportation lines, the hilly contour of Quebec makes the construction of railways both difficult and costly. Contrasted with Ontario, Quebec at the time of confederation was but poorly equipped with railway facilities and possessed a total railway mileage of only 575 miles as against 1447 miles in the more fortunately situated adjoining province. In the early 70's, the people of Quebec became intensely interested in the possibility of railway development and believed that the prosperity of their province would be greatly enhanced if the construction of new railway lines could be stimulated.

With this end in view, the provincial authorities had already promised either cash or land grant subsidies to fourteen new railway lines previous to 1873. The financial crisis of that year plunged most of the companies, which had undertaken to build these lines, into financial difficulties and forced them to abandon all further construction. Under these circumstances, the provincial government felt obliged to carry certain of these enterprises through to completion. In order to accomplish this, the province abandoned the policy theretofore adhered to of keeping expenditures within the annual revenue and ran into debt for the first time in 1874 when a loan of \$4,000,000 was contracted for railway aid purposes.

*Extensive Borrowing Practised in Quebec*

This preliminary loan proved but the precursor of many further borrowings. Between 1867-1913, the provincial railway subsidies reached the grand total of \$16,811,000, which were paid for out of provincial bond issues. In consequence of these rail-

way subsidies and of the deficit occasioned by wasteful and extravagant expenditures, the provincial debt increased rapidly. Starting on even terms with Ontario in 1867, Quebec had contracted by 1898 an indebtedness of over thirty-two millions of dollars, and no less than one-third of its entire income was required to pay the interest on this large sum.

Concerning Quebec's railway subsidy policy, the opinion prevails to-day that another line of conduct should have been pursued. The better plan would have been to have avoided running into debt and to have created new sources of revenue whenever it was determined to extend further aid to railway enterprises. In this way, the province would have been in a position to have bestowed annual aid grants out of surplus revenues,—in imitation of the system followed in Ontario,—upon the more important and most deserving railway projects. The following quotation contains a very illuminating criticism of Quebec's railway policy.

"In the past this Province has given with a generous hand, particularly to railways, some of which have been hardly completed when they were sold sometimes to foreigners for sums that fully covered the actual costs of construction, thus enabling the promoters to put the subsidies granted by the Province in their own pockets while the Province goes on paying interest on them forever. It cannot be doubted that the Province has derived considerable benefit from the construction of some of these railways, the exact amount of which cannot of course be estimated. We can, however, roughly estimate the cost. We have to-day a net debt of \$25,000,000, we have already paid interest on that debt amounting to at least \$26,818,812, while we have an annual interest of over one million and a half to pay each year in the future. In estimating the benefits derived from the construction of these railways, many of which would no doubt have been built independently of our aid, let us also estimate the benefits we could confer on the Province by the interest already paid, and by the sum of \$1,500,000 of interest we each year pay to foreign countries. We cannot recall the past but in dealing with the future let us not forget the past."<sup>1</sup>

#### *Difficulties in Financing the Province*

With the inauguration in 1874 of the policy of lavish grants to railways, an era of government extravagance set in and it became increasingly difficult to administer the finances of the province. The limited sources of revenue and the numerous and often unexpected demands on the treasury accounted in part for this state of affairs. Compared with Ontario, Quebec was in a number of respects under a much heavier expense. The administration of justice alone absorbed one-quarter of its total revenue, since it had to contribute nineteen-twentieths of the amount expended

<sup>1</sup> Hon. H. T. Duffy, Budget Speech, Quebec House of Assembly, March 11, 1902.



recklessly started without any proper estimate of the expenditures ultimately involved and their cost was swelled by employing men by the day instead of letting the work by contract. Large amounts due the province from the municipalities for promised subscriptions toward the construction of new railway lines were remitted by the government just before elections. The annual deficit in the provincial finances was at times covered up by opening a special account and charging thereto items which should have been defrayed out of ordinary revenue account. Railway guarantee deposits, in reality a species of trust funds left with the provincial administration by various railway companies to make good the provincial guarantee of the interest on certain railway bonds, were used, without a shadow of authority, to meet the ordinary expenses of the governments. Under such circumstances, it is not surprising that recurrent deficits became the rule in Quebec.

So acute did its financial situation become that the province was obliged to introduce in 1892 certain new kinds of taxes which Ontario was spared from imposing. These bore heavily on the commercial classes, which were largely British, and consisted of special taxes on transfers of property, on certain kinds of corporations and on merchants, manufacturers and brokers according to the rental paid by these last named persons. In addition, a special license had to be paid for before a trade or profession could be pursued.

#### *Sound Financial Program Since 1902*

In 1902, however, the provincial administration adopted the new policy "of living within our means," which has been carefully adhered to ever since. Expenditures have not been allowed to exceed the government's income and from 1906 on the ordinary revenue has shown a very satisfactory annual surplus. A system of "prudence with progress" has been pursued, government funds have not been spent on local industrial undertakings and the provincial debt so far kept within its former limit. Government subventioning of industrial undertakings is no longer in favor and the development of water powers and of public utilities is left to private initiative.

Quebec indeed has not attempted to imitate Ontario in investing government funds and in pledging the provincial credit in electric power enterprises. The policy pursued has been to lease power sites on reasonable terms to private parties for immediate

development and not allow them to lie dormant merely for speculative purposes. It is estimated that Quebec's water powers are capable of furnishing eight million horse power when fully developed at a cost of \$15 a horse power as compared with \$45 where coal is used.

As explained in the next quotation, a wide divergence exists between Quebec's and Ontario's method of treating the insane.

"The whole system of public institutions in the Province of Quebec as regards their maintenance is different from ours. The Quebec Government has no reformatory prisons or lunatic asylums, and does not maintain public institutions in the sense in which we maintain them. Quebec makes grants of money to pay the cost of maintenance of lunatics and of inmates of reformatories to religious or other organized corporations under fixed contracts."<sup>1</sup>

As regards forest wealth, Quebec is one of the richest of the Canadian provinces. The forest area of all Canada has recently been estimated at 414,000,000 acres. Of this total, 130,000,000 acres are within the limits of Quebec. In the early days after the confederation, a large migration of French Canadians took place from Quebec to the United States. As a means of staying this exodus, Quebec for many years purposely disposed of its forest lands on low terms to intending settlers. Thus between 1873 and 1890, 6,235 square miles of timber lands were parted with, at an average of \$62 a square mile. At the present time, less than one-twentieth of the province's estimated forest area is in private hands and, for the past decade, the policy of alienating such lands has been abandoned. The policy now pursued has been described as follows:

"A sale of timber limits is not a sale at all, either of the land or the timber on it, but it amounts simply to a lease of the right to cut timber on it under certain well determined conditions and restrictions. The right to become lessee of a particular limit is offered at public competition and the person paying the highest bonus obtains the license to cut."<sup>2</sup>

Until very recently, good roads were almost unknown in Quebec. The old French customs prescribed that each farmer was to be held responsible for the condition of the public highway directly in front of his property and the same provision is to be found in Quebec's provincial laws. About 1909, however, the provincial administration began to expend part of the surplus revenues in the construction of government roads. Later on in 1912 it made an offer to the 353 Quebec municipalities to pay the required sinking fund and one-half of the stipulated interest

<sup>1</sup> Hon. G. W. Ross, Ontario Budget Speech, 1899.

<sup>2</sup> Hon. Mr. Duffy, Financial Statement, Quebec House of Assembly, 1902.

on any forty-year loans contracted for the building of good roads. Originally the limit of such loans was fixed at \$10,000,000, but the municipalities took advantage of the Good Roads Act to such an extent that new legislation had to be passed in 1915 authorizing the borrowing of money beyond the limit first specified so that the work of improving the roads throughout the province might be continued. These good roads expenditures have caused the provincial debt to rapidly increase during the last few years, and are alone responsible for recent provincial borrowings. On June 30, 1915, the gross liabilities of the province amounted to \$37,557,918, which were partially offset by liquid assets in the sum of \$9,537,852.

*Revenues and Expenditures*

For the fiscal year 1914-15, the ordinary provincial receipts were \$9,597,925 and the ordinary expenditures \$8,710,515. Despite this surplus of ordinary revenues over expenditures of \$887,410, the gross debt of the province increased during the same period \$7,606,830. This increase was due entirely to the issuance of bonds for good roads purposes. The principal receipts were \$2,027,845 on account of Dominion subsidies; \$1,840,347 from lands and forests; \$1,660,853 from succession duties and \$1,086,767 from various forms of licenses. Among the expenditures, interest on the public debt occupied the first place with a total of \$1,477,894. Other important items were public instruction \$1,476,724; legislation and civil government \$1,026,576, war donations \$692,994, public works and buildings \$681,064 and lunatic asylums \$617,625. Just as in Ontario, Quebec's provincial revenue is increasing from year to year and its expenditures are growing in a similar ratio. If the policy of the present administration be continued, however, ordinary expenditures are not likely to again overtake and exceed the ordinary provincial receipts.

## PROVINCE OF NOVA SCOTIA

On account of the hilly surface of the country and its extensive coast line broken by numerous rivers and inlets, Nova Scotia's road system is much longer and more costly to maintain than in the more level regions of Canada. The presence of so many streams necessitates the construction of main roads on both banks, where one highway would have otherwise sufficed, and these roads must often make long detours in order to encircle the arms of the sea. Again, the many estuaries and riverlets have to be spanned by innumerable bridges, which are costly to build and maintain. The province possesses no less than 18,000 miles of roads and these are linked together by 1,000 large steel bridges and 22,000 bridges of smaller size. The great financial problem in Nova Scotia, therefore, has been how best to raise the funds required to keep the roads and bridges in good order.

*Decreased Revenues After Confederation*

Before the formation of the Dominion, the finances of Nova Scotia were in a flourishing condition. The customs duties yielded large returns so that the provincial government was able to make large monetary grants to the counties for the upkeep of the roads. Shortly before confederation took effect, the average yearly expenditure of the province for educational purposes and upon the road and bridge service amounted to \$766,569. Confederation, however, deprived the province of its revenue from customs duties, which was its main source of income. This loss the subsidies received from the Dominion government only partially made good. This is shown by the fact that the provincial revenue in the year before confederation amounted to \$1,857,247 as contrasted with gross receipts of \$586,696 and a deficit of \$357,238, in the year following its adoption. Nor did any permanent improvement take place for many years thereafter. Even as late as 1882, the provincial revenue was only \$541,729. As the custom had been to pay for all local improvements—such as roads, bridges, wharves and courthouses—out of the general funds of the province, the greatly diminished revenues made it impossible for the provincial government to undertake these local improvements on the same scale as before. Where \$300,000 or more had been spent annually on roads and bridges prior to the confederation, only \$100,000 could be so devoted during the period 1878-82. The result was that the provincial

roads and bridges, which had been in a good state of repair prior to the formation of the Dominion, had to be sadly neglected.

Aside from the Dominion subsidy, the province's sources of income were few. A meagre revenue was divided from the crown lands, which were sold at the low figure of 22 cents an acre. The provincial coal deposits comprising an area of 960 square miles had only just begun to be exploited and the royalty collected on the coal mined yielded only a small sum. At the same time, the demands on the provincial treasury began to be more pressing. The wooden bridges erected in the great provincial road building era prior to 1850 began to show signs of decay and their replacement by iron structures became imperative. Under these circumstances, the provincial administration from 1882 on determined to borrow large sums of money to be expended for the betterment of roads and bridges. It might have been left to the various counties and municipalities to look after these renewals and to raise the amounts needed therefor by direct taxation. But the provincial government felt that it ought to undertake this replacement work for the reason that it could borrow the sums required at a less rate of interest and for a longer period of time than the local governing bodies. The various counties were, however, charged interest on the amounts expended within their respective confines and the annual road grants made to them were diminished by the sum total of this interest.

Prior to 1908, the expenditure of the moneys voted by the provincial government for road purposes was determined for the most part by the members of the house of assembly supporting the government.

"When the (road) expenditures were made they were made on the recommendation of a member for the county in sympathy with the Government and in whom the Government had confidence."<sup>1</sup>

"Previous to 1882, before the act of County Incorporations came into operation, the entire road grant as far as he could remember was in the hands of the members representing the various counties favorable to the party in power, and the moneys were expended largely upon their recommendation, wholly so he believed in commissions varying from \$20 to \$200. There could be but one result from that system, namely, that even if an honest endeavor would be made to expend the moneys properly, to a large extent they would be diverted from the proper use. About 1880 the County Incorporation Act was passed, and, after that instead of the thirty-eight members of the legislature, having the moneys in their hands, it was turned over to the municipal councillors to be expended by them.

These moneys were not wholly wasted, but were not properly applied for the reason that political considerations exercised an all power-

<sup>1</sup> Hon. Mr. Drysdale, Nova Scotia House of Assembly Debates, 1901, p. 216.

ful influence in matters of that kind in the municipal councils as well as in this House or any other legislature."<sup>1</sup>

"At the present time these moneys passed through different channels. Some of this expenditure was made through the municipal councils and other appropriations were expended more or less under the advice and direction of the representatives of the people through commissioners."<sup>2</sup>

In 1908, a provincial road commissioner's department was established with the aim of preventing political influences from controlling the expenditure on roads and bridges. It is now within the power of the provincial cabinet exclusively to determine how these road moneys shall be spent.

As explained in the next citations, Nova Scotia derives its provincial revenues from only a few sources.

"Our revenue was almost wholly derived from three sources, viz., our Dominion subsidy in which there was practically no variation, receipts from mines, royalties and succession duties. . . . He felt that it would be a misfortune if our sources of revenue should be increased. He thought it was a sound principle in political economy to take from the people as little as possible, provided the services of the country could be properly maintained. In some of the Provinces, a large portion of the revenue was derived from sources which could be properly regarded as a form of direct taxation. A tax on corporations and large license fees furnished a considerable part of their revenues and without these he feared they would find it difficult to make a creditable financial presentment. In Nova Scotia, happily for the people, no such forms of taxation were resorted to."<sup>3</sup>

"The Province of Nova Scotia is the only Province in Canada to-day which does not in some way obtain a revenue directly from the people. If you examine the statute books of the other Provinces you will find a very large measure of their revenue is obtained by taxation in a field in which we as a Province have got to get our first dollar out of. In many of the other Provinces, the liquor traffic affords a large means of revenue, while in the Province of Nova Scotia we do not, nor so far as I know, ever did collect a dollar from this source. Then again, in the other Provinces the taxation of corporations, home and foreign, has always been a fruitful source of revenue. We alone of all the Provinces remain practically where we started at Confederation on the question of taxation, the only exception being the introduction of succession duties, and even this, if I remember right, is on a more moderate basis than that of our neighbors. This happy condition of affairs has been brought about wholly and solely by the fact that within the Province of Nova Scotia we have immense deposits of coal, and that our legislation dealing with our mineral development was wise and judicious."<sup>4</sup>

#### *Revenues and Expenditures*

It was not until 1893 that the Nova Scotian coal fields began to be developed on a large scale and from that time on, the provincial revenues showed a steady gain. In most of the last twenty years, ordinary receipts have exceeded the ordinary expenditures. Nevertheless, the provincial debt has been grow-

<sup>1</sup> Hon. Mr. Bissett, *Nova Scotia House of Assembly Debates*, 1907, p. 524.

<sup>2</sup> Hon. Mr. Chisholm, *Ibid.*, p. 512.

<sup>3</sup> Hon. Mr. Murray, *Nova Scotia House of Assembly Debates*, 1899, p. 53.

<sup>4</sup> Hon. Mr. Murray, *Nova Scotia House of Assembly Debates*, 1901, p. 60.

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ing slowly all this time on account of the sums spent on roads and bridges and charged to capital account. At the end of the fiscal year 1914-15, the gross debt of the province was \$13,410,911 against which there were available assets of \$6,500,000. During the same year, the ordinary revenue proved to be \$1,953,302 and the expenditures \$2,073,672. Dominion subsidies furnished \$638,866 of the income reported, mine royalties \$727,224 and succession duties \$106,978. The largest items of expenditure were for debenture interest \$470,100, on education \$431,408 and on roads \$277,275. The net liabilities of the Province increased \$795,293, of which \$726,501 was due to expenditures on capital account of various kinds.

## PROVINCE OF NEW BRUNSWICK

Just as in almost all the other British North American colonies, New Brunswick until the formation of the Dominion obtained the greater part of its provincial revenues from customs duties. Out of the large receipts thus procured, the provincial legislature made special grants from time to time to the various counties to assist them in opening up and maintaining the public roads. Later on the province proceeded to construct bridges over the rivers and streams which had been previously crossed by ferries. In place of allotting small and desultory grants, it became the custom for the government to make larger and regular appropriations to the different counties and the feeling arose that the provincial administration should look after the roads and bridges entirely. This lack of local self-initiative and this dependence on the provincial government to carry out improvements is still characteristic of the inhabitants of New Brunswick to-day.

"This Province gives more money to the people than any other in the Dominion. The result is disastrous to public spirit, for the people expect the Government to do everything. The people ought to learn to help themselves."<sup>1</sup>

Confederation, with the attendant loss of the customs duties, had the effect of reducing the average annual receipts of the province from three-quarters to less than half a million dollars. Concerning the financial status of the province immediately after the Union, the following passage can be quoted to advantage:

"Up to 1874, the revenue of the Province met the expenditure very fairly, but then the railway subsidy act was passed. . . . New Brunswick was placed in a different position from some of the other Provinces when she entered Confederation. In Ontario the highway and road tax fell upon the municipalities. The Province of Ontario with a population of over 2,000,000 only contributed \$260,000 for common schools as compared with over \$150,000 by the Province of New Brunswick with about a seventh of the population. The charge of public hospitals and insane asylums in Nova Scotia is borne almost entirely by the municipalities so that to a certain extent New Brunswick started in the race with a handicap."<sup>2</sup>

*New Brunswick's Crown Lands*

Aside from the Dominion subsidy, which furnished more than two-thirds of the total provincial receipts at the outset under confederation, the crown lands of the province, aggregating some seven million acres, supplied the only other important source of revenue. At first, an export duty was levied on lumber, but this

<sup>1</sup> Hon. L. J. Tweedie, *New Brunswick House of Assembly Debates*, 1906, p. 62.

<sup>2</sup> Hon. Mr. Mitchell, *Synoptic Report*, *New Brunswick House of Assembly Debates*, 1892, p. 33.



right was soon surrendered in return for an increase of \$150,000 in the annual Dominion subsidy. New Brunswick's crown land policy has been favorably commented upon.

"The plan adopted in the Province of New Brunswick is to hold an auction sale on the first of August of every year, when the lands not occupied are opened for competition at public auction in the city of Fredericton, and sometimes as much as \$800 or \$1,000 is paid for a lease of a square mile of timber land. The Government looks upon the timber of that Province as the farmer might the crop of his farm. The purchaser gets the right to go in and cut trees of certain dimensions, the trees being scaled by a Government official, the purchaser paying a stumpage tax on all timber produced. He has the right to renew his lease on certain conditions or he may drop it if he desires to do so."<sup>1</sup>

Considerable difficulty has been experienced in estimating the revenue to be derived from those crown lands owing to the uncertainty as to the size of the yearly lumber cut and as to the amount to be derived from the annual sale of licenses. The receipts from this source are determined by the kind of winter experienced. In a season marked by a heavy snowfall and favorable for lumber operations, the provincial revenue will be augmented. On the other hand, unfavorable weather conditions may prevent a large amount of lumber from being cut even though the prices for all wood products be unusually high.

#### *Liberal Subsidies to Railways*

Imitating the example set by Quebec, New Brunswick also embarked on a policy of liberal subsidies to railway enterprises. These subsidies had totalled \$5,500,000 by 1892 and they were in a number of instances unwisely spent.

"The greater portion of the amount (railway subsidies) had been uselessly spent in the construction of railways. From a great many of these lines, the Province can never realise much advantage. Several will probably be abandoned and what are necessary could have been constructed in time out of ordinary revenue."<sup>2</sup>

The railway subsidy policy was responsible for the beginning of New Brunswick's provincial debt, which by 1886 had reached nearly one million dollars. This indebtedness had been in part caused by the small but recurrent annual deficits in the provincial finances. These deficits were due to the over expenditure, beyond the amount appropriated by the provincial legislature, in the public works department. Up to 1873, there had been scarcely a year in the history of the province in which this department had not to confess to an over-expenditure. On behalf of the government, it was claimed that because of the freshets which

<sup>1</sup> Mr. Wilcox, Nova Scotia House of Assembly Debates, 1901, p. 156.

<sup>2</sup> Mr. Fowell, Synoptic Report, New Brunswick House of Assembly Debates, 1892, p. 87.

were of annual occurrence, it was impossible to estimate with even approximate exactness what the expenditures in any given year would be. Inasmuch as the practice was to consult legislators in regard to the spending of the road moneys, the members of the provincial parliament were in a large degree responsible for this over-expenditure.

*Dr. Stockton* asked regarding over-expenditure account of bye-roads in several counties.

*Hon. Mr. Ryan* explained that that was a matter largely in the hands of members.<sup>1</sup>

"The over-draft in the Public Works Department was a very serious difficulty, but if each representative would call to mind his own strenuous efforts to secure aid for his county, he would be able to have some conception of what the united pressure of all the counties must be."<sup>2</sup>

#### *Receipts Exceed Expenditures*

During the last five years, one-eighth to one-third of the province's total expenditures have been charged to capital account. To this account are being debited the large amounts spent for the construction of permanent bridges in the province. With one exception, the ordinary receipts have exceeded the ordinary expenditures. Both receipts and expenditures have exceeded the estimates and the practice is to increase the amounts spent on the public roads beyond the sum originally appropriated whenever the revenue proves more than anticipated. Thus in the fiscal years 1913 and 1914, the actual exceeded the estimated receipts by \$50,423.16 and \$27,821.94 respectively. In order to keep the ordinary expenditures as close to the ordinary revenues as possible, the road expenditures for the two years mentioned were increased by \$39,646.48 and \$25,353.84 beyond the original estimate submitted to parliament.

On October 31, 1915, the net debt of the province was reported at \$5,782,000. The total ordinary receipts during the fiscal year ending on the same date were \$1,634,079, while the ordinary expenditures reached the total of \$1,626,633. Three-eighths of the total revenue or \$637,976 was received as a subsidy from the Dominion government against \$591,905 derived from crown lands and \$155,191 from succession duties. The chief items of expenditure were \$407,653 on public works; \$335,637 for interest and \$282,891 for education. Only one-fifth approximately therefore of New Brunswick's total revenue is required to pay the interest on the provincial debt as contrasted with one-fourth in Nova Scotia.

<sup>1</sup> Synoptic Report, New Brunswick House of Assembly Debates, 1891, p. 50.

<sup>2</sup> Mr. Flewelling, *Ibid.*, 1893, p. 52.

PROVINCE OF PRINCE EDWARD ISLAND

When a confederation to embrace all the British North American colonies was first proposed, the people of Prince Edward Island declined to join the new Union on the ground that it would impose unaccustomed burdens on them. The Island was deriving so large a revenue from customs duties that the provincial government was able to bear the entire cost of the educational department and to look after the public roads and all local improvements as well. This state of affairs continued until 1871 when the administration of the day had a law enacted for the construction of a government owned and operated railway. Instead of prescribing the route to be followed, the government left the location of the line to the contractors and agreed to pay them a certain fixed amount for every mile of completed track. It therefore was in the interest of the contractors to build as circuitous a road as possible and to wind around instead of cutting through the various hillsides that were met with. When the railway was completed, it turned out to be a "twisting, winding wriggling" narrow gauge line with steep grades and an extraordinary amount of curvature, which greatly increased the operating costs.

*Absentee Landlords and Railway Problem*

Owing to the unexpectedly high cost of their railway enterprise, the government was confronted with the necessity of either imposing a direct tax equivalent to \$2 a head of the existing population, or of joining the recently formed Dominion. They finally decided on the latter policy as being the lesser of two evils. Besides granting the usual forms of subsidy, the federal government took over the Island railway and furnished the province with the funds required to pay for it. Furthermore the Dominion authorities put at the disposal of the province the sum of \$300,000 on July 1, 1873, the date on which the Island joined the confederation, to buy out the owners of the proprietary estates. These absentee landlords had been granted by royal decree all the lands of the province and drew annually large sums of money from the province in the shape of rents. By the special grant just described, the federal government made it possible to end this leasehold system and for the Island farmers to own their lands in fee simple as in the other provinces of Canada.

While the Island customs duties had yielded \$304,377 in 1872, the anticipated provincial income under confederation was only

estimated at \$222,320. For the first few years after confederation, however, the receipts proved considerably larger than this owing to several unexpected windfalls from the Dominion. At the close of 1873, the province possessed a cash balance after the payment of all liabilities of \$268,114. In view of the fact that the Island had lost the greater part of its revenues on entering the Dominion and could only count on lessened yearly receipts thereafter, the wise policy might seem to have been to husband this surplus. Instead of doing so, the government yielded to the pressure brought on it from various sections for an increased expenditure on public works. A number of expensive bridges and wharves were therefore erected at the expense of the surplus, which was practically exhausted by 1876. In that year, the provincial revenues were \$254,144 and the expenditures \$353,327, leaving a deficit of no less than \$99,183.

#### *Direct Taxes Imposed*

On account of this deficit, the government was obliged to impose a direct assessment tax the next year. Five years later, this direct tax was repealed for the reason that the government had the prospect of collecting several additional claims against the Dominion. The administration announced that it would be quite time enough to resort to direct taxation when the province had collected all its dues. In the words of a provincial premier:

"If the time shall come when the authorities at Ottawa say: 'You can get no more money, the coffers are closed, you need not apply any further,' then I am ready to take some practical step on the question of making revenue and expenditure meet."<sup>1</sup>

That the Island should have to submit to a direct tax of any sort has been regarded locally as a misfortune. Attempts to place part of the burden of supporting the schools directly on the people met with strong opposition. Even before confederation, any plan which did not provide for the payment of the entire salaries of the teaching staff out of the provincial revenues was certain to be rejected. If the people could have been forced to contribute something directly for educational purposes, it would have awakened a greater interest in the public schools and would have relieved the strain on the provincial finances. But the system of federal government subventions made it futile to attempt to tax the people directly.

<sup>1</sup>Hon. Frederick Peters, P. E. I. H. of Assembly Debates, 1893, p. 334.

Next to the amount spent for the furtherance of education, the largest provincial expenditures are to be found in the public works department. Since no loose stone or granite suitable for road making purposes is to be found on the Island, the roads have to be macadamized with imported stone which greatly enhances the cost of keeping the public highways in repair. In the early days after confederation, the members of the provincial parliament attempted to keep the expenditures of the road moneys under their own control on the plea that the people held them in a large measure responsible for the condition of the roads. Nowadays, however, the department of public works has the direction of this expenditure.

#### *Revenues and Expenditures*

Prince Edward Island is the only one of the Canadian provinces, which has a declining population. Possessing at one time over 111,000 inhabitants, its total population according to the census of 1911 was only 93,000. By a peculiar statutory provision, however, its per capita subsidy from the Dominion can undergo no diminution but remains fixed at the figure which its maximum population figures would entitle it to. Despite this very favored treatment at the hands of the Dominion, the Island's expenditures have exceeded the receipts for quite a period of years and the provincial debt at the close of 1915 was \$1,012,000. With a slight increase in the existing small land and income tax, which combined yield about \$50,000 annually, these deficits could have been for the most part avoided. As it is, four-fifths of the provincial receipts come as a largess from the Dominion Government. In 1915, the Dominion subsidy formed \$372,182 out of total receipts of \$470,729. The total ordinary expenditure was \$510,345; \$169,695 of which was spent on education, \$112,096 by the public works department, \$59,436 on the Provincial Hospital and Infirmary, and \$41,082 for interest on the public debt. Since the Island is losing rather than growing in population and as it possesses no manufactures of importance, no marked changes in its fiscal outlays or receipts are to be anticipated in the near future.

## THE PRAIRIE PROVINCES

On July 15, 1870, all of British North America between the Provinces of Ontario and British Columbia became by royal proclamation part of the Dominion of Canada. Out of this territory the three so-called Prairie Provinces have been formed, namely, Manitoba, which entered the confederation in 1870, Alberta and Saskatchewan. These last two provinces did not come into existence until September 1, 1905, and have therefore a comparatively brief financial history.

*Manitoba*

When Manitoba asked for leave to join, the question had to be decided how the newer provinces which sought admission to the Union were to be treated. Besides granting the eighty cents per head of population subsidy and a sum sufficient to meet the expenses of her legislature, Manitoba was given,—corresponding to the relief afforded the other Provinces,—a credit of \$551,447 by the Dominion. As the new province had incurred no actual debt on which this credit might be applied, it was allowed interest at the rate of 5 per cent per annum on the amount named which was termed an allowance in "lieu of debt." In the case of all the Prairie Provinces, this allowance is adjusted after every decennial census according to the growth of population. At the present time, the debt allowance of each of the three provinces has been fixed at \$8,107,500. Manitoba has drawn, however, \$475,816 from the capital of her debt allowance in order to meet the cost of certain provincial public works. The balance to her credit has therefore been reduced to \$7,631,684.

The original British North American colonies all possessed considerable tracts of public lands, which had been transferred to them by the British Crown at quite a long period before confederation. But, when the region now embraced within the Prairie Provinces was acquired from the Hudson Bay Company, the new territory was held for the benefit of the entire Dominion. The provinces formed therefrom were left therefore without any of the usual sources of territorial revenue, that is, from the lease or sale of public lands. In order to put them on an equality with the four provinces which formed the confederation originally, the Prairie Provinces have been allowed certain annual grants by the federal government in lieu of public lands. In the case of Manitoba, this allowance now amounts to \$409,000.

Alberta and Saskatchewan are each allowed \$562,500 with the proviso that the sum mentioned is to be increased to \$750,000 and \$1,125,000 when their populations reach 800,000 and 1,200,000 respectively.

Outside of Dominion subsidy receipts, the Prairie Provinces derive more or less substantial revenues from succession duties, corporation taxes, including railway taxes, and liquor licenses. In its early days as a province, Manitoba received special advances from the Dominion to make good the deficit in its revenues and in this way its provincial income was made sufficient to meet all expenditures until 1879. In fact, provincial receipts and expenditures were on a fairly even keel until 1887, when the province ran into debt on a considerable scale for the first time for the purpose of building certain new railway lines and thus breaking the monopoly of the Canadian Pacific Railroad.

The practice in Manitoba has been for the provincial government to bear half the expense of costly local improvements such as bridges. On the other hand, the other provinces have borne the entire cost of bridging the rivers and of providing ferries across them and have also provided the bulk of the amounts spent upon the construction of roads. All three provinces have assisted in the building of grain elevators. In 1910, Manitoba purchased 163 such elevators at a cost of \$1,100,000. After conducting such elevators for two years at a total loss of \$120,000, the province leased them to a farmers' organization known as the Grain-Growers' Grain Company. Alberta and Saskatchewan have contented themselves, however, with simply providing the local farmers' co-operative elevator companies with the funds required to erect the structures needed.

#### *Movement for Governmental Ownership of Public Utilities*

All the Prairie Provinces have gone in for government ownership and operation of telephones on a more or less extensive scale, which circumstance affords another evidence of the strength of the movement in Canada for government assumption of public utilities. According to the public accounts, the government telephone lines have all shown a handsome surplus of receipts over expenditures. It is claimed, however, that this surplus is more fictitious than real and that it has only been attained by omitting proper depreciation charges and by debiting to capital what should rightfully have been charged to maintenance account. Members of the provincial parliaments are

said to have made demands on the authorities for the extension of telephone lines, that resulted in the rapid and premature construction of many rural telephone lines where the business offered did not warrant their installation. On behalf of the administration, however, the plea has been made that the tripling in hardly seven years of the number of telephones in use shows the advantages to be obtained from having the telephone service owned and controlled by the state. The fact that the Manitoba telephone accounts were removed from the jurisdiction of the provincial auditor and have ceased to be audited by him since May 1, 1909, has caused some doubt to arise, however, concerning the correctness of the figures put forth by the Manitoba government relating to the operation of its telephone lines.

#### *Scandals in Politics of Prairie Provinces*

If one may judge from the various monetary scandals which have come to light during the last two years, no very high political standard can be said to prevail among the politicians of the Prairie Provinces. Nor can one party claim to be better than the other in this respect. In Manitoba, the Conservative administration has had to leave office under a cloud and a like fate has overtaken the Liberal ministry in Saskatchewan. Contracts have been awarded to political supporters of the government and then altered with official connivance so as to allow the contractors to make undue profits. In return for such favors, the contractors have had to contribute large sums to the party campaign funds nominally for electioneering purposes. In the case of the Manitoba Parliament Building, the minority report of the 1915 public accounts committee<sup>1</sup> charged that the provincial treasury had been defrauded of \$300,000 through improper changes in the specifications of contracts. Political campaign funds are thus obtained from public works patronage to the detriment of the taxpaying public.

#### *Revenues and Expenditures*

Considering now the financial showing of the three provinces, Manitoba reported between 1900-13 a total surplus of \$7,251,206 of receipts over expenditures. Of this surplus, no less than \$7,145,655 had been spent on public buildings. On November 30, 1915, the direct liabilities of the province aggregated \$28,323,293 and the indirect \$26,920,873. The fiscal year 1913-14

<sup>1</sup>Journal, 1915, Manitoba House of Assembly, p. 182.



showed receipts of \$5,512,163 and expenditures of \$5,638,658 on ordinary accounts. The telegraph and telephones department yielded receipts of \$1,814,072; the Dominion subsidy, \$1,592,675 and \$813,128 was derived from succession dues and corporation taxes. Among the expenditures, \$1,392,390 was expended by the telephone department; \$1,181,155 on public works; \$768,946 for interest on the provincial debt and \$724,560 for education.

Saskatchewan's debt on October 1, 1915, was stated to be \$20,972,043, of which \$5,362,632 represented the cost of the provincial telephone system. In addition, there were \$32,550,000 indirect liabilities consisting of railway bonds guaranteed. In the fiscal year ending April 30, 1915, the Provincial revenue amounted to \$5,024,935 as contrasted with expenditures aggregating \$5,368,649. On public works \$1,225,466 was expended, \$1,111,111 for the administration of justice and \$955,733 for interest on the public debt. Of the total revenue, the Dominion subsidy furnished \$1,989,960, while land office fees and liquor licenses brought \$491,022 and \$251,380 respectively to the provincial treasury.

At the close of 1914, Alberta had a debt of \$22,000,000 and had further agreed to guarantee the interest on \$57,710,450 of railway bonds. For the same year, receipts and expenditures showed figures of \$5,255,275 and \$5,401,495 respectively. Among the leading sources of revenue were Dominion subsidies totalling \$1,814,521, corporation taxes which amounted to \$516,617 and land title fees which yielded \$348,981. The largest expenditures were \$955,435 for the government telephone service, \$797,176 for education and \$657,844 for interest on the public debt.

## PROVINCE OF BRITISH COLUMBIA

When British Columbia with 17,000 actual inhabitants entered the Dominion in 1871, the federal government granted the new province a debt allowance of \$27.77 per capita on an assumed population of 60,000. This sufficed to retire the entire provincial indebtedness, but this fortunate state of affairs did not continue for any length of time. From the date of its admission to the Canadian Confederation and until the year 1904, British Columbia had to face an almost unbroken series of deficits amounting in the aggregate to ten millions of dollars. On account of its mountainous surface and sparse and scattered population, the cost of administering the affairs of the province proved to be unduly high. Indeed, the problem of looking after a province of such vast extent and of so rugged contour will always be a serious one. An attempt was made in 1876 to better the state of the provincial finances by introducing an income tax and a direct tax on real and personal property. But as these taxes were fixed at an absurdly low figure and varied from one-fifth to one-half of one per cent of incomes and of assessed valuations of property, the provincial treasury obtained no permanent relief through their imposition.

*The Rise and Fall of a Surplus*

With the advent of a new administration to office in 1903, however, a turn for the better occurred. As the low state of the provincial finances made the utmost economy in all expenditures necessary, the outlays on the various government services were reduced as far as possible. At the same time, the existing taxes were raised and new sources of revenue created with the result that a kaleidoscopic change took place in the pecuniary status of the province. The recurrent deficits were replaced by a series of constantly mounting surpluses. Stimulated by the good times in the lumber industry, and the construction of new railway lines on a very enlarged scale, an abnormal era of prosperity set in. The government derived an enormous revenue from the sale of public lands, timber licenses and town site lots, and at the close of the fiscal year 1910, had an accumulated surplus sufficient to pay off the then existing debt of the province.

Instead of using the surplus to retire all outstanding obligations, the administration decided to expend it on public improvements. In the language of the provincial minister of finance:

"The Government has decided that it is good policy to meet the requirements of the country in the way of public improvement squarely at the expense of our surplus. There is an immense amount of money required to open up an immense extent of territory and the sooner it is undertaken the sooner we will reap the fruits of the development to follow."<sup>1</sup>

"We are building for the future and the Government deems it wiser to anticipate the requirements of rapid development than to wait and impede progress of settlement."<sup>2</sup>

Accordingly a gigantic program of road-building and of public improvements of all sorts was inaugurated which, in less than three years, completely absorbed the government's available bank balance of nine million dollars. By the close of 1913, \$20,000,000 had been spent by the provincial government in opening up new roads and trails. In order to link these up properly, it was announced that an additional expenditure of \$55,000,000 was required. British Columbia consists, in large part, of mountains, where the construction of all means of communication is very costly. In building these, precipices have to be skirted; bridges made to span swollen rivers, causeways flung across abysses and road beds blasted out of solid rock. At the beginning of 1914, the government was obliged to largely curtail the carrying out of its ambitious program. Just at this time when the province's cash reserve became exhausted, the cessation of railway building and the collapse of real estate values also caused a financial depression to set in which very unfavorably affected the anticipated provincial revenues. While the receipts of British Columbia in the fiscal year 1912-13 proved to be \$2,533,000 more than the estimates, they amounted to \$2,200,000 less than had been anticipated in the year 1914-15. The income of the province shrank from \$12,510,000 in 1912-13 to \$7,800,000 in 1914-15 and for 1915-16 was estimated at \$5,944,000 or \$5,300,000 less than the expenditures. If the estimates for the last named year prove to have been correct, the expenditures during the last three fiscal years will have exceeded the revenue by over \$15,000,000. No similar fluctuation in revenue has ever occurred in any other province of Canada nor has such a quick change from an era of a plethora of provincial funds to a period of comparative penury in government receipts ever been duplicated in the Dominion. In view of the extraordinary variance in the income of British Columbia, the unwisdom of the government is so quickly dissipating the handsome surplus of a few years since becomes all the more apparent.

<sup>1</sup> Hon. Price Ellison, Budget Speech, February 13, 1911.

<sup>2</sup> *Ibid.*, Budget Speech, February 24, 1913.

In 1915, the net debt of the province was given at \$20,748,000. It has also guaranteed the interest and principal of \$80,322,000 of railway bonds and cash railway subsidies amounting to \$1,550,000. For the fiscal year 1913-14, the receipts of British Columbia were \$10,049,000 and the expenditure \$15,763,000. The resultant deficit totalled \$5,284,000 and was mainly due to an overexpenditure in the public works department of \$8,477,000, instead of \$5,316,000 as first estimated. Other important items of expenditure were \$1,330,000 for civil government, \$1,141,000 for education, \$747,000 for administering justice and \$530,000 for interest on the public debt.

#### *Revenues and Expenditures*

In the way of receipts, British Columbia derives its greatest revenue from the sale of public lands and from timber leases and royalties. These yielded a total of \$3,950,000 in 1913-14. The timber royalties extend over a long term of years and are gauged on a sliding scale. The average selling price of timber is assumed to be \$18 per thousand feet, while the stumpage rate is reckoned on the same assumed basis and is to run from 50 to 85 cents until the close of 1919. Between 1920-24, the stumpage royalty is to be increased by 25 per cent of any rise above \$18 per thousand feet in the average selling price of lumber. For 1925-34, this extra royalty is fixed at 30 per cent; for 1935-44 at 35 per cent and for 1945-55 at 40 per cent of any such rise.

Next in importance to the revenue received from forestry sources was the income produced by the \$500 per capita Chinese immigration tax, which amounted to \$1,279,000. The Dominion subsidy brought \$723,135; registry fees \$652,000, the real property tax \$50,000, and the income tax \$348,000. As is perhaps to be expected in a country where the fluctuations of fortune are so great, British Columbia has the reputation of being the most corrupt of all the Canadian provinces. It is to be hoped that the successors of the administration just dismissed from office on the ground of misconduct will give the province a better government.

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### THE ELEMENTS OF STATE BUDGET MAKING

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## CHAPTER I

### INTRODUCTION

#### *A Word to Conjure With in Politics*

The term "budget," like the phrase "social justice," or "Americanism," has now become one of the staple commodities of politics. The Republicans in their platform of 1916 condemned the Democratic administration for "its opposition to and rejection of President Taft's oft-repeated proposals and earnest efforts to secure economy and efficiency through the establishment of a simple, business-like budget system, to which we pledge our support, and which we hold to be necessary to effect a needed reform in the administration of national finances." The Progressives proposed to set up "a new standard of governmental efficiency through a complete civil service system, a national budget, and the destruction of 'pork barrel' legislation." The Democrats demanded economy in expenditures and to that end favored "a return by the House of Representatives to its former practice of initiating and preparing all appropriation bills through a single committee chosen from its membership, in order that responsibility may be centered, expenditures standardized and made uniform, and waste and duplication in the public service as much as possible avoided. We favor this as a practicable first step towards a budget system." The Prohibitionists pledged themselves to "the adoption of the budget system."

During the campaign of 1916, state and national candidates seeking the suffrages of the voters, repeatedly referred to their advocacy of a "budget system," as if it were something as definitely agreed upon as a ship subsidy or a beet-sugar bounty. Mr. Hughes pledged himself to an "executive budget" without attempting to explore the implications of the adjective or the noun. Mr. Seabury, candidate for governor in New York, announced his belief in an executive budget, but explained that he in no way favored depriving the legislature of any of the rights or prerogatives it now enjoyed. His opponent, Mr. Whitman, claimed that he had already devised and put into practice a budget system during the 1916 session of the legislature.<sup>1</sup> In New Jersey, Mr. Edge, author of the 1916 budget bill of that

<sup>1</sup> See No. 72, MUNICIPAL RESEARCH (Feb. 1916).



state, put forward among his chief claims to the office of governor, for which he was a candidate, his services in connection with the passage of a budget measure,<sup>1</sup> Lesser lights, aware of the rising cost of government and of the vague but insistent demand of the public for efficiency and economy, also announced their advocacy of a "budget system."

*Some Misapprehensions Regarding Budgets*

In view of these declarations and announcements and the evident confusion which exists in the popular mind about the meaning and significance of the term, the time has now arrived to make clear, in brief and concise form, just what is involved in the adoption of a "budget system." It is well known that as soon as a cause has become popular, superficial agitators in politics seize upon the issue, turn it to their own purposes,—and frequently succeed in discrediting it by adopting half-way measures in the place of the genuine article. There is no little danger that the good name of budget reform may be injured; and for this reason those who are intelligently and honestly endeavoring to bring order out of our present financial chaos may be blocked by the advocates of temporary expedients that are worse than nothing.

In attempting to clear up the obscurity which clouds much of the discussion about "budget systems," it should be said at the outset that the problem before us is no simple one. We are not confronted with the relatively easy task of adding a wing to an old structure, or of devising a new bureau or office of government. On the contrary we are brought face to face with operations as complex as the multifarious activities of modern government and with processes which go to the very root of our constitutional law and political custom. If any one is under the delusion that the governor of the state or the President of the United States can on his own motion introduce a "budget system" by expanding his message into a monumental fiscal statement or by recommending the adoption of an act of appropriation prepared in executive chambers, it would be well for him to rid himself of that delusion immediately. If any one thinks that a mere statute requiring an executive consolidation of estimates is sufficient to install a "budget system," he also is in error. Above all, is it a travesty upon the term to give the name "budget law" to an act which merely equips legislative committees with staffs of searchers.

<sup>1</sup> See No. 70, MUNICIPAL RESEARCH, pp. 1-19; text of bill, pp. 61-67.

*The Budget is Both an Instrument and a Process of Government*

It might as well be said, once for all, that a budget system involves fundamental executive and legislative practices, carefully devised accounting methods, adequate expert service, efficient record keeping and work reporting—in short, all of the processes of good management. This is so in England, it is so in Germany, it is so in France, it is so in Japan, in Canada, and in every country where a budget system is in operation, even though there are, of course, certain differences in procedure. It involves an abandonment on the part of the public of the traditional attitude that the treasury exists for the satisfaction of local needs. It involves the training of public servants equipped to operate a system based on sound business principles. Whoever expects, therefore, to rush a "budget bill" through the coming legislature and to see an immediate revolution in finances, is destined to be disappointed. Advocates of a budget system have before them a season of scientific research into accounting and reporting methods, civil service practices, public works management, cost measurement and record keeping. Moreover, they have before them a long campaign of public education.

To speak concretely, a scientific budget is both an instrument and a process of government. As an instrument, it is a means of getting before the representative body, which has the power to control the purse, a well-considered plan, with all the information needed to determine whether the plan should be approved before funds are made available for its execution. As a process of government, it is a procedure for insuring complete accountability for past grants, and for requiring those whose future acts are to be controlled to assume full responsibility for preparing, explaining and defending their plans and proposals for future grants, such plans for the future to include: (1) an expenditure program based on estimated service needs, and (2) a revenue program indicating what grants of authority are desired to enable them to raise the money to make purchases as well as to meet outstanding obligations. Both the character and contents of the budget as an instrument and the nature and character of the procedure as a process of government are discussed in the chapters which follow: Chapter II dealing with the preparation and consolidation of the estimates; Chapter III dealing with the contents and arrangement of the budget; and Chapter IV dealing with the legislative procedure required to make the budget effective as an instrument of control over the purse.

## CHAPTER II

### PREPARATION AND CONSOLIDATION OF THE ESTIMATES

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The most important business that comes before a state legislature is the voting of money for the coming fiscal year or biennium. To act intelligently in this vital matter, the members of the legislature must have before them at the beginning of the session a carefully prepared financial plan. This financial plan or program should be based on a statement of services to be rendered, with an estimate of cost, in order that members may know how much, and for what purposes, money is to be raised. This is obviously a dictate of sound business and good sense; and yet nowhere in the union is this principle in force except in the few states that have recently exacted budget legislation. In practice, the governor makes some recommendations in his message at the beginning of the session; private members introduce measures carrying charges upon the public treasury from day to day during the session; appropriation bills are reported out from one or more committees toward the end of the session; at intervals during the session appropriation measures are passed and transmitted to the governor, and then during the closing hours a long list of money bills is rushed through both houses. The legislature then adjourns, leaving the governor to veto at will and no one knows until weeks later just how much money has been voted away.<sup>1</sup>

#### *By Whom the Plan for Next Year's Business Should Be Prepared*

The folly of such methods is admitted by the most complacent. The persons best fitted to prepare a program of service with an estimate of cost are those who are familiar with the service, namely, the officers who have given careful consideration to the problem and who are responsible for results. The chief executive is the one to be charged with the duty of presenting to the legislature early in the session a comprehensive review of service needs and of state financial conditions, with a revenue and borrowing

<sup>1</sup> A detailed and carefully prepared account of what actually happens in a legislature in the passing of money bills will be found in *MUNICIPAL REVENUE*, No. 72.

program which is consistent with the welfare of the state. This means an "executive budget."

*What Is an "Executive Budget"?*

An executive budget for a state government means:

- 1—That the best that a numerous representative body can do is to review, discuss, and approve or disapprove a plan, which is brought before it by *someone*
- 2—That that *someone* must be one who is made responsible for thinking about the state's business as a whole and for planning its future work before the legislature meets
- 3—That the one officer who, in the line of duty, can do this and who is properly regarded as speaking for the state as a whole rather than for a collection of counties and towns and cities is the elected chief executive
- 4—That the governor is the one to whom both the people and their representatives may look to consider initially state business as a whole in terms of service needs and service costs and to propose means of raising funds, because he can be held responsible to the voters of the state
- 5—That to do this effectively the far-reaching demands of officers and the clashing interests of the several divisions and departments of the government must first be worked over in the presence of the governor and a balanced program adopted, which he is ready to advocate in advance of the legislative session
- 6—That the responsibility of the executive for what has been done by the administration and for the estimates of future expenditures must be enforced through publicity, and to this end the executive plan should be presented openly to the legislature and discussed frankly in such a manner as to give each member of the legislature a chance to ask questions of spending officers while the details are under consideration and before either the appropriation or the revenue bills are brought up for enactment
- 7—That back-stairs negotiations between individual spending officers and members of standing committees meeting behind closed doors—practices fostered by putting the initiative in the legislature—should be discouraged and, if possible, discredited

- 8—That when the legislature acts, whether on an appropriation bill, a revenue bill or a borrowing bill, it should act on a recognized part of a well balanced and well considered plan, and that no member should be required to vote on any matter until he has had a chance to become informed by asking questions of administrative officers—thus obviating the evils which arise when members are compelled to vote blindly on a lot of detailed bills prepared by a few anonymous committeemen without any reference to the needs of the state as a whole.
- 9—That with a view to enforcing responsibility on the part of the executive and providing for publicity, the legislature should be compelled to act on the budget in committee-of-the-whole with the executive and all members present, and that the budget should remain in the committee-of-the-whole until every issue raised may be clearly drawn and facts and arguments may be adduced on both sides in such a manner as to permit the members in the legislature and the voters outside to form their judgments on the basis of facts rather than on empty partisan phrases. In other words, the issues of political campaigns should be developed in the debates over the work of the state government.

*The Futility of Official Compilations of "Requests"*

Looking now at the obverse side: It should be stated emphatically at the outset that no mere compilation of requests perfunctorily set up by departmental clerks or even intelligently made by detached officers can serve the purposes of a budget. Such documents at best merely express the views of officers who have no responsibility for the service as a whole, or for providing the ways and means of financing the appropriations asked for. It is an easy matter for the heads of divisions to have estimates prepared on the basis of the preceding year's expenditures and then to add a number of pious requests for increases. In fact, any spending officer can make a strong appeal for more funds when he does not have to consider how the money is to be raised. In practice, he is tempted to ask for too much in the hope that he may get what he really wants. And when each spending officer goes independently before a legislative committee without having his requests considered as a part of a state-wide plan, he knows that in all probability his colleagues are "padding"

their demands with the thought that they may have a safe trading margin in the process of bickering in the committee room. Moreover, the members of the legislature know that the requests do not constitute a well-balanced plan; that in most instances the estimates are not based on carefully calculated necessities; that at best they afford merely the basis for an unsafe guess as to actual and relative needs. Nor is the situation relieved by having these requests first tabulated by a comptroller or other state officer who has no executive responsibility. Anyone who has followed the fate of the tables of requests annually compiled by comptrollers and other independent finance officers knows that these are useless as guides to shaping legislative opinion.

But still more open to suspicion are the bills of individual members who have no responsibility for administration and who are simply bidding for the support of their local constituencies. That which the administrative officer would hesitate to request on his own initiative, especially if he knew that it must be considered as a part of a plan to be subjected to the scrutiny of the governor, the individual member of the legislature is ready to press in the hope of gaining local support. With each member ready to press a measure which will benefit his own constituency, all sense of perspective is lost. And this the estimating officer may take into account when he makes up his request for appropriations for the legislative committee. The tabulation of such requests by a finance officer conveys little real information.

For example, in the annual tabulation of desired appropriations submitted to the legislature of New York by the comptroller on December 15, 1915, a request is made for \$603,500 for the Binghamton State Hospital, and that request is accompanied by certain items such as "salaries and wages" for the year ending September 30, 1915, \$225,852. What does this mean in terms of a well-balanced governmental plan? With no executive scrutiny and no means of asking questions of a responsible officer, how can the individual member of the legislature, when called on to vote, tell from such information whether the salaries and wages at Binghamton are high or low as compared with salaries and wages for similar or identical work in other state institutions or in private institutions of that character? How can the individual member tell from the information submitted by the comptroller whether the supplies consumed at Binghamton have been advantageously purchased and wisely and eco-

nominally used? Can anyone get at the relative importance of the Binghamton enterprise as compared with others pressing their requests for funds? The tables compiled by the comptroller show us that the appropriations desired at the legislative session of 1916 total \$603,500 whereas the expenditures during the fiscal year ending September 30, 1915, were \$567,743.65, but on the face of the record there is practically nothing which can be utilized by the legislature as a basis of judgment in voting money. There is no analysis of work to be done or of costs such as the head of a small private corporation would require before presenting a request to his board of directors. And the head of the public corporation, the state government, is not even permitted to attend the meeting. He may be asked to come before a small committee, but whether he is or is not, the conclusions of this committee must be taken by other members largely on faith. While in the closing hours of a session hundreds of bills are being pressed by their sponsors, each of whom must look after his own fences, there is little advantage in having a chance to make a five-minute speech, and almost no opportunity to become informed. As a result, the legislature itself is distrusted, and the people fall back on the governor to protect them from the acts of that body.

What is to be done under such circumstances? In the case of the hospital, the legislature may accept at face value the requests of the head, because he enjoys a good reputation or he is a "good fellow," or he has been a loyal party man or the senator from his district needs some contracts for his party friends. If partisan expediency requires it, or if the project has the right kind of "backing," the hospital gets its increase without question. If there is opposition, instead of giving to each member a chance to interrogate the responsible officer on the floor, a special legislative committee may be sent to visit the hospital and report on the proposed increase in expenditures. The committee takes a "junket trip" (railway travel and hotel bills, \$718.26—incidentals, \$312.08) and after spending two or three days "examining the plant" the chairman reports in favor or against the increase. How much such a report is worth when made under the usual conditions of a legislative investigation, the experienced may answer.<sup>1</sup>

<sup>1</sup> On the merits of "executive" and "legislative" budgets, see MUNICIPAL RESEARCH, No. 70, pp. iii-xv, 36-45, and No. 73, pp. 1-19; 42-49.

*An Alternative to the Executive Budget*

In an endeavor to free the management of the government, and particularly the management of certain activities in government, from the partisan control exercised by the political "boss" through his henchmen in the legislature, the American public has essayed several methods of administration designed to take these activities "out of politics." The plan usually adopted provides for a continuing board or an official head with unlimited tenure.

The office so organized is less of a tool in the hands of an irresponsible party boss, but is still dominated by irresponsible influences which sometimes take the form of non-partisan social and civic organizations of relatively small groups of citizens who are not subject to electoral control, however well they may represent high ideals or expert opinion. Thus, in such branches of governmental activity as health, charities, education, prison administration or civil service, for example, we still have by this method an irresponsible government, because citizens are not politically responsible to the community at large and certainly cannot be held responsible through any of the devices that have been evolved in the development of our form of government which rests on electoral control.

The result of this method is that, instead of having an irresponsible government dominated by one political "boss," the business, still of an irresponsible government, is dominated by a large number of "non-partisan" bosses, and influences centering in the officers and directors of private societies who may have special knowledge of value to the administrator. Under this system, the highest ideal of control is to have what is actually an irresponsible committee or commission on public business, partly ex-officio, perhaps, and partly legislative, which proposes to take the state administration "out of politics" and asks the individual members of the legislature and the people to take its prescriptions and conclusions on faith.

Thus, to protect the body politic from the ravages of a malevolent germ, the "boss," a large number of benignant germs are set to work without attempting to end the condition,—irresponsible government,—under which the malevolent germ was developed and flourishes.

If we believe that irresponsibility is a normal and desirable environment for state administration, we may be willing to depend upon the antitoxins which are produced through the efforts



of those highly altruistic, specialized societies for which the American civic body has become so well known. If, however, we believe it is worth the trouble to clear out the bad conditions in order to obtain a government responsible and responsive to the people, we may be willing to adopt the executive budget. The question is whether we want to develop immunity against a malevolent germ which has been fostered in the body politic by a condition of irresponsibility or to do away with the condition favorable to the growth of the malevolent germ,—whether we are to depend on remedies for disease or to give first consideration to sanitation.

*The Underlying Data for a Budget*

But whatever the method and the organization for control over the public purse—whether a responsible governor is required to submit and explain a plan to a representative body or a small irresponsible mixed board of control is to take the place of the chief executive—obviously those who are to present the proposal must start with something more tangible than “tabulated requests” from spending officers, legislative “junkets” and the findings of special or standing committees.

*Responsibility for the Preparation of the Estimates*

Assuming that the data for the preparation of the estimates are at hand, who shall be made primarily responsible for organizing and reviewing them and transmitting them to the legislature? Will it be the one whom the voters have elected as chief executive? It is almost impossible to raise this question without having some tawdry politicians shed tears over the “separation of powers” and invoke the shades of our departed ancestors, thus obscuring the discussion at the outset. If, however, we restrain our emotions for a brief period it is possible to use a little reason. We first may advert to the fact that it has been the abuse of that very doctrine that has taken the initiative out of the hands of the government and turned our representative bodies into purveyors of “ripper” legislation and administrative patronage. We may also advert to the fact that on account of the perversion of this principle the people have been compelled to turn to the governor for the exercise of destructive legislative powers, and to private specialized civic agencies for protection.

We can best throw light on the situation by considering certain propositions which will hardly be disputed. The first proposition

is that the spending officers in charge of the work of government are as a rule better fitted to state the needs of their respective departments than the average casual member of a sixty- or ninety-day legislature or the average member of a standing committee even if he has seen service for two or three terms. The second proposition is that many of the demands on the treasury are for local purposes and that under our current practice such demands are matters of bargaining and "log-rolling," which can only be checked by some central co-ordinating authority representing the state as a whole. The practice in most of the states of allowing the governor to veto items in appropriation bills is a recognition of the need for such a check; the creation of budget commissions and laws putting the budget-making duties on the governor are in further recognition of the same need. The third proposition is that responsibility can not be fixed in a standing committee of the legislature answerable only to local constituencies, and that resort to legislative budget commissions does not fix responsibility—it only gives to an irresponsible small group of legislators facilities for being better informed and consequently more powerful.<sup>1</sup>

Reasoning from these premises, a large and important group of budget advocates contends that the initial preparation and organization of the budget should be in the executive branch of the government. In that branch of the government, the spending and operating officers are continuously engaged in doing public work. They know at first hand the needs and responsibilities of the enterprises over which they exercise control. Compare, for example, the knowledge of the head of a hospital, who has served the state for years, with the knowledge of the standing committee chairman who pays a three days' visit to the institution! We should make it the duty of this expert to submit his proposal to the governor and the duty of the governor to assume responsibility for submitting a plan for the public service as a whole. He should submit this plan to the legislature at the beginning of the session and individual members should have a chance openly and publicly to interrogate executive officers. The expert should not deal directly and in secret with a few members of the legislature in a committee room. \*This does not mean that the value of the expert in charge of technical work has been reduced. It simply means that the initiation of plans

<sup>1</sup> See defects of Sage budget bill, passed in New York, 1916, No. 70, MUNICIPAL RESEARCH, pp. 42-45

and demands is placed squarely on the expert. It forces him to prepare his program and to sit down with other experts to make plans which will bear official scrutiny. On the point that the expert should take the initiative there is little disagreement between the advocates of the executive and legislative budgets, but they differ widely as to the best way of testing the expert's proposals, and also as to the best way of informing the individual members of the legislature and the public so that they may exercise the judgment which in final analysis is their affair.

#### *Demands for Local and Special Purposes*

In every state, there are constantly arising demands upon the treasury from local interests and from citizens and associations organized to promote various lines of public activity. The demands of civic agencies represented by "secretaries," like the demands for local purposes advocated by "members," are usually the subject of log-rolling and secret negotiations; and appropriations are the result of "dark room" methods. They represent rather the "pull" which can be exercised by the several members and the "boss" or "bosses" who conduct the negotiations. The advocates of the executive budget urge that all requests for money should be open to the public and available for scrutiny on the part of the governor—the responsible chief executive elected by the voters of the whole state—before they go before the legislature. They further insist that the localities and interested persons calling for special appropriations should be compelled to file their demands with the governor in time to receive careful consideration in connection with the total estimates for appropriation before the legislature meets; in any event, that the representative body and the people shall have the benefit of this review.

The proposed constitution of the state of New York, defeated in 1915, contained the following section which illustrates the proper method of treating local appropriations:

"No public moneys or property shall be appropriated for the construction or improvement of any building, bridge, highway, dike, canal, feeder, waterway or other work until plans and estimates of the cost of such work shall have been filed with the secretary of state by the superintendent of public works, together with a certificate by him as to whether or not in his judgment the general interest of the state then requires that such improvement be made at state expense. This section shall not apply to the contributions of the state

to the cost of eliminating grade crossings or to items in the budget for the construction of highways from the proceeds of bonds authorized under section four of article nine of this constitution or section four of former article seven thereof as in force on the first day of January, one thousand nine hundred and ten."

Even if no provision were made for executive review and presentation to the legislature, such a provision might be a very wholesome requirement. The Edge budget bill of 1916 (New Jersey) stipulates that any organization, body, committee, or person intending to request an appropriation from the legislature for any particular object or purpose or for any new annual expenditure shall present such request to the governor on or before November 15.<sup>1</sup> Without attempting to propose an ideal solution here we may conclude by saying that special and local appropriations should be brought into the executive budget, when provision for an executive budget is made, and that a heavy burden of proof should rest upon the legislature when it enacts appropriation measures that are not recommended by the governor.

#### *The Consolidation and Review of the Estimates*

When the estimates are gathered from the spending officers and from local and special agencies, should they simply be assembled by a clerk in the comptroller's office and transmitted to the legislature in tabular form? The advocates of the executive budget answer this with an emphatic negative. They point out, first, that such a procedure puts a premium on exaggerating official needs and that under this practice estimates and requests are usually padded by the officers preparing them—that they therefore form no solid basis for legislative judgment; secondly, that such demands generally exceed possible revenues by large amounts; thirdly, that the first steps in consolidation should be taken by conferences among the chief spending officers; and fourthly, that some responsibility for the final review and organization of the estimates should be assumed by an authority that can actually be held responsible. All signs point to the governor as the authority who should be made to carry this burden. In his council of spending officers, conflicting demands should be adjusted and a balanced work-program of administration laid out, before legislative consideration is invited. If the estimates

<sup>1</sup> For appraisal of Edge bill, See MUNICIPAL RESEARCH, No. 70, pp. 9-17. For text of bill see pp. 61-66, *ibid.*

go immediately to the legislature, they are reviewed and consolidated by men who have absolutely no responsibility for carrying on the work of administration. Pork-barrel and ripper legislation demonstrate the unfitness of the legislature for the work of initiation.

This task is given to the governor by the recent budget legislation of New Jersey, Maryland, and Nebraska. The New Jersey law provides that "Upon the receipt of requests for appropriations and the report of the Treasurer and Comptroller, the Governor shall proceed to examine such requests and reports for the purpose of determining the necessity of the appropriations so requested and shall in a separate message transmit to the legislature on the second Tuesday in January a summary of such requests and reports, together with his recommendations thereon."<sup>1</sup> It is thus squarely "up to the governor" to have some knowledge of the state's business and to assume some responsibility for it.

#### *Public Hearings by the Governor*

In order that publicity may be given to the executive budget in advance of the legislative session, it is urged, and in some cases provided, that the governor shall be required to hold public hearings and entertain objections to his program on the part of officers and citizens. The proposed New York constitution of 1915 provided that: "The governor, after public hearing thereon, at which he may require the attendance of heads of departments and their subordinates, shall revise such estimates according to his judgment." But with a genuine executive budget in full operation under conditions that place responsibility on the governor for the preparation and submission of a plan or proposal which he personally or through representatives is called on to explain and defend before the legislature, and with a legislative procedure which requires that the details of the plan be considered instantly in committee-of-the-whole before the bills are taken up for passage,—under such conditions, such a provision would be quite gratuitous. In the first place, the governor would, for his own protection, seek all the advice obtainable before submitting his plans. In the second place, the governor and the people alike would have the benefit of inquiries, review and criticisms in the committee-of-the-whole after the plan was submitted. This would not only give to any opposition a chance to organize but

<sup>1</sup> See MUNICIPAL RESEARCH, No. 70, pp. 61-66.

also would bring into play powers of inquiry and publicity that could not possibly obtain at an unofficial hearing before the legislature met.

*An Executive Budget Calls for a New Type of Governor*

Placing responsibility for the state's business on the governor calls for a new type of statesman. Not long ago the new governor of one of the richest commonwealths in the union declared openly that he knew nothing about public finances when he took office. He was well aware, when a candidate, that he would have to assume no real responsibilities in the matter if elected. The voters being acquainted with this fact were wholly indifferent as to his qualifications for business management. Under our "good, old system" the governor signs a number of warrants, pardons a few criminals, appoints a few officers (but not enough of them to secure material authority over or responsibility for administration), and preaches a little sermon to the legislature once or twice a year. But if the governor is made responsible for initiating the budget and thus for having some genuine information about public finance and public business, many an aspiring politician will have to go to the trouble of finding out something about government before he can hope to rise to leadership. Back-slapping, hand-shaking, and back-stairs negotiations will not be the only royal road to power. Imagine a candidate for governor studying taxation and finance, looking into problems of cost accounting, inquiring into institutional management, mastering the intricacies of state administration, and going into office with full knowledge of the grave responsibilities which will rest upon him!

*Technical Aid for the Executive*

Of course, under a system of control which takes all responsibility for initiation away from the governor and which makes it next to impossible for one who has played an important part in public affairs to be chosen chief executive, it is not to be expected that a newly installed governor will be informed on state matters or that he can become a full-fledged expert in a few weeks. But it is a matter of experience that when the chief executive is made responsible for leadership, no one except a man who has come to be a leader can be elected to this office. Under such circumstances, the recognised head of the government succeeds himself or the leader of the opposition succeeds him and no one in the opposition

can become a leader except a man who has become at least in some degree proficient in statecraft. But even if he is an expert, he himself cannot master the infinite details of his budget, except through persons who can devote their time to it. For that reason he needs a staff of permanent experts in taxation, finance, expenditures, accounts, and management, fully equipped with information gathered by long and intimate association with the spending departments and prepared to give him counsel and advice. And when such staff aids have been developed, no executive who is responsible for the preparation and submission of a financial plan and for its execution after adoption would think of dismissing them and surrounding himself with a group of neophytes. In our state organizations there is no reason why the office of secretary of state should not become a staff agency responsible to the governor, with special duties in the matter of the state's public business. So too, there is no reason why the comptroller's office may not become the independent staff agency of the legislature. Until it was drawn for the constitutional convention of 1915, there had never been prepared a description of the organization and functions of the government of the state of New York, and there was no place where a governor could get a complete picture of the business over which he presided. In New Jersey, the governor in the preparation and review of his budget may call upon the state officers and may appoint two special assistants to aid him in carrying out the act. Here is the beginning of a new and promising profession,—that of budget making and finance.

Under the English system, the treasury constitutes a staff agency to the chief executive, while the office of the Comptroller and Auditor General is the staff agency of the House of Commons, co-operating with the committee on public accounts in reviewing the acts of spending officers. President Taft's commission on economy and efficiency recommended the organization of a strong staff agency for the information and advice of the President as an essential part of the machinery of a national executive budget.

#### *Conclusions as to Preparation and Review of Estimates*

The experts in the several services should be required to take the initiative in the preparation and submission of plans and to keep accounts and prepare reports showing the cost of the various functions performed, with a view to making exact information

*PREPARATION OF THE ESTIMATES*

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available as a basis for estimates as well as for answering questions asked by executive officers, members of the representative body and the public.

The heads of the great departments should form a cabinet council for reviewing, adjusting and reducing demands on the treasury so as to secure a balanced budget based on the needs, the condition of the revenue, and the resources of the state.

Competent staff agencies should be organized and developed—one responsible to the governor to assist executive officers in the review of estimates and the preparation of a budget; another to assist the legislature and its committees in the critical review both of the acts and proposals of the administration.

The governor should assume ultimate responsibility for settling disputes between department heads and they should not be permitted to carry on secret negotiations with the legislature.

The governor should be "the chief budget officer" of the state, responsible, in final analysis, for the consolidated budget as presented to the legislature.

The legislature should follow a procedure adapted not only to providing an open public review of accounts and proposals, but also to making an effective forum for the discussion of issues that are developed, and a medium of publicity as well.



## CHAPTER III

### THE CONTENTS AND ARRANGEMENT OF THE BUDGET

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Before we can decide upon the form or design of an instrument, we must ask ourselves the question: "For what purpose and by whom is it to be used?"

#### *For what Purpose a Budget is Designed*

The answer is clear. A budget is a means through which the representatives of the people can *intelligently exercise* their right and power to control the public purse—to decide what work shall be undertaken by the government and how much shall be paid for it. The purpose of the public purse is to provide funds for work to be done. The purpose of the control is to make certain that the officers charged with doing the work shall in fact carry out the will of the legislature. A budget must, therefore, (1) develop information for the legislature and the public, (2) authorize work and provide funds for it, and (3) provide for the effective exercise of control over the spending officers.

#### *The Fundamental Requirements of a Budget*

In order that *information* relative to the work of the government may be available, the spending officers should be required to render an account of the work which they have done and for which they are responsible. In order to develop such information in any detail desired, each member of the legislature should be given a chance to interrogate the spending and planning officers when their proposals are before that body for review and discussion. *Control* over the conduct of the spending officers can be enforced by provisions of law relative to the disposal of funds in detail and through a sense of responsibility engendered by the necessity of submitting to the legislature periodically a record of stewardship.

#### *The Essential Parts of a Budget*

It is evident that the purposes of a budget require the presentation of the following essential matters:

- I—A *work program* showing *what work has been done* by the government with costs classified by functions or services rendered and *presenting a plan for the future* with the estimated costs of the several functions or services
- II—An *analysis of cost* of things used or to be used in doing work, or rendering service, such as personal service, supplies, materials, etc.
- III—An *estimate of appropriations* to be developed into an act of appropriation—a statement of the amount of appropriation or drawing accounts to be placed at the disposal of the spending officers to cover the cost of the work to be done
- IV—An *estimate of revenues and borrowing*—a statement of the ways and means of raising the funds to pay for the work authorized

In addition, there are other supplementary data which are important in enabling the legislative body to review and discuss details and essentials intelligently. The character of the supplementary data will be considered later. We turn to the general summary or *conspectus* now and to the four essentials later.

#### *A General Summary Presented as a Financial Plan*

In a very real sense a budget is a "prospectus" submitted with a view to getting the project "financed." One of the first things done by any person who proposes to get a plan financed is to present his "prospectus" in a very simple and summary form so that those to whom he appeals for financial support can view it at first in its broad outlines and then go into details by the method of questions and answers. In like manner, every essential to a budget can be laid before a legislature of a state in a single page, presented in some such form as the following:

THE ELEMENTS OF STATE BUDGET MAKING

GENERAL SUMMARY OF FINANCIAL REQUIREMENTS FOR  
THE FISCAL PERIOD 19— TO 19—

	TOTALS	CHARACTER OF EXPENDITURES				
		EXPENSES		Fixed Charges	Capital Outlays	Other
		Other Than for Upkeep of Property	Upkeep of Property			
ESTIMATED EXPENDITURES						
For activities organized under the state government						
For activities and services not under the state government						
TOTAL EXPENDITURES						
For personal services						
For supplies and materials						
For equipment						
For lands and buildings and other improvements to land						
The public debt						
Pensions and retirement allowances						
Deficit of past periods						
Contributions						
All other purposes						
ESTIMATED REVENUES AND BORROWINGS						
By taxation						
General tax						
Special taxes						
By miscellaneous revenues						
By sales						
By borrowing						
By application of accumulated surplus						
TOTAL REVENUES, BORROWING, ETC.						
Excess of estimated expenditures						
Excess of estimated revenues, borrowing, etc., over estimated expenditures						

I—THE WORK PROGRAM

The estimated cost of conducting an enterprise must be stated in several ways in order to convey adequate information to those who have to pass judgment upon it.

1. Since one of the main purposes of a budget is to control spending officers, the estimates as well as the accounts should be shown in terms of *official responsibility*. To do this both the accounts and the estimates must admit of being summarized by organization or estimating units, that is, by departments, bureaus, and other divisions to which specific sums are appropriated for expenditure.

2. *Expenditure policies*, however, are considered and determined in terms of services rendered or to be rendered. To lay the foundation for inquiry and discussion of this kind, the accounts and estimates must give costs analyzed by functions or services rendered to the public.

3. Questions of *revenue and borrowing* policy, on the other hand, must be considered in relation to the *character* of the expenditure, i.e., whether the cost or estimated cost is in the nature of operating expenses, fixed charges, capital outlays, etc.

All of these analyses, therefore, should be factors of a work program or record of activities and undertakings of the state, which are to be submitted to the representative body for approval. By way of summary, these may be presented comparatively in some such form as follows:

COMPARATIVE SUMMARIES OF COST FOR THE YEARS 19— TO 19—  
BY ORGANIZATION UNITS

RESPONSIBLE SPENDING AGENT	ENSUING YEAR (ESTI- MATED)	CURRENT YEAR (ESTI- MATED)	19— ACTUAL	19— ACTUAL	19— ACTUAL
The legislative branch					
The courts					
The executive branch					
The office of governor					
Secretary of state					
The treasury, etc.					

THE ELEMENTS OF STATE BUDGET MAKING

COMPARATIVE SUMMARIES OF COST FOR THE YEARS 19— TO 19—  
BY FUNCTIONS

SERVICES RENDERED	ENSUING YEAR (ESTI- MATED)	CURRENT YEAR (ESTI- MATED)	19— ACTUAL	19— ACTUAL	19— ACTUAL
CONTROLLING FUNCTIONS					
Electoral control					
Legislative control					
Executive directional, control					
CENTRAL BUSINESS OR PROPRIETARY FUNCTIONS					
Providing funds					
Acquisition, care and upkeep of property					
PUBLIC SERVICE FUNC- TIONS					
Administration of justice					
Preservation of public health					
Care of the defective, dependent and delin- quent					
* * * * *					

COMPARATIVE SUMMARIES OF COST FOR THE YEARS 19— TO 19—  
BY CHARACTER OF EXPENDITURES

	ENSUING YEAR (ESTI- MATED)	CURRENT YEAR (ESTI- MATED)	19— ACTUAL	19— ACTUAL	19— ACTUAL
EXPENSES					
Other than upkeep of property					
Upkeep of property					
Repairs					
Replacements					
FIXED CHARGES					
Interest					
Pensions					
Other					
CAPITAL OUTLAYS					

*The Classification of Expenditures and Estimates*

It is obvious that an analysis of expenditures, as to their nature, is necessary before any critical judgment can be exercised. Again and again, do we hear administrative officers

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announcing from the house tops that they have cut the expenses of their departments when, as a matter of fact, all that has happened is a reduction of capital outlays on the completion of certain permanent improvements. It means nothing to say that the state spent \$3,213,879.13 for health services last year and that only \$1,275,345.18 is called for this year. This may represent not an increase in efficiency but a positive decline in the management. It may be that the cut in the appropriation is due to the fact that new buildings costing \$1,000,000 were completed last year while, at the same time, the cost of normal maintenance has been increased.

Supporting the comparative summaries, the estimated cost of services for the ensuing year and the actual cost of any past year may be presented in such form that all three analyses can appear in one exhibit, as follows:

THE DEPARTMENT OF AGRICULTURE	CHARACTER OF EXPENDITURES				
	EXPENSES		Fixed Charges	Capital Outlays	Other
	Other Than Upkeep of Property	Upkeep of Property			
Office of Commissioner of Agriculture Administration Central business office Purchasing Care and upkeep of office buildings . . . . .					
Public Service Functions Promotion of crop raising Promotion of stock raising, etc.					

Bare figures of dollars and cents in totals, however, do not tell the whole story. They only lay the basis for considering such questions of state policy as these:

What is the relative cost of one service function to another?  
Should the state increase or decrease its expenditures for one service or another?

Are the service functions well distributed, or should the departments be reorganized?

Should the state acquire properties for its various uses or should it continue to rent?

The foregoing analyses do not show whether the several services are well managed, whether the contracts and purchases have been economically made. They do not even show what amounts should be appropriated. Critical consideration of these questions requires further analysis.

## II—ANALYSIS OF COST BY OBJECTS

One of the essentials to the critical review of costs of services rendered as well as of work proposed is an analysis "by objects." As already stated, since the exercise of control over the acts of spending officers involves controlling the purse, the work done or proposed must be translated into *things needed* to do work. This means "personal services," "supplies," "materials," "equipment," etc., etc. To make this information available an exhibit should be prepared on some such lines as the following:

Spending Officers	Total Expenditures	Services, Personal (Pay-roll)	Supplies and Materials	Equipment	Lands, Buildings and Other Improvements	Other

As illustrating this sort of analysis, the plan adopted by Governor Whitman of New York, in his "Tentative Budget Proposal for 1916-17," has much to commend it.<sup>1</sup> In that plan, the estimates were classified as follows:

- (1) Personal service
  - (a) Salaries regular
  - (b) Salaries temporary
  - (c) Wages regular
  - (d) Wages temporary
- (2) Maintenance and operation (other than personal service)
  - (a) Fuel, light, power, water

<sup>1</sup> For a complete description of Governor Whitman's proposal see No. 72, MUNICIPAL RESEARCH, pp. 27-36.

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- (b) Supplies
- (c) Materials, etc., etc.
- (3) Repairs
- (4) Construction or permanent betterments

*The Classification of Estimates*

Although this classification is in a measure illogical and inconsistent, it is clear that when applied to estimates for a coming year it permits the exercise of some critical interpretation, especially when it is accompanied by a work-program for the future arranged on the unit cost basis. Let us take a concrete example by way of illustration. The head of the department of health is asking for an increase and he is compelled to set forth his demands somewhat in the following manner:

Personal service (increase) .....	\$10,000
Salaries .....	\$3,500
Wages .....	6,500
	\$10,000
Maintenance and operation other than personal service .....	12,000
Total increase demanded .....	\$22,000

Then he is required to give a detailed itemization showing whose salaries and wages are to be increased and on what basis and to include a statement as to the work to be done, i.e., whether more patients will have to be taken care of or more inspectors appointed, etc. With all this information before him, the alert member of the legislature will have a basis for judgment and discussion. Are the salaries and wages proposed high or low? According to what standards? Is the new work proposed more important than the work proposed by some other department? Assuming that cuts must be made, where should the reductions come? Here is some real meat for legislative consideration.

III—"ESTIMATES OF APPROPRIATIONS"

An analysis of cost of work done or proposed is only the first step toward determining which accounts of appropriations will be required. This result must be qualified by balances of stores on hand, non-lapsing balances of appropriations already made, policy with respect to repairs and replacements, policy as to financing by loans, etc. Such information may be made available by taking these several factors into account. What is required is to translate estimated total cost of work to be done or services to be rendered into total cost of "personal services,"



"supplies," "materials," and "equipment" used or to be used; then to translate these costs into needs for new or additional drawing accounts which will vary according to circumstances. If a large part of the funding is done with continuing appropriations or special funds built up from sales, the amount of new appropriations may be relatively small. In any event, the balances of stores on hand may be an important factor. It is usually assumed that all things purchased out of an appropriation for a year will be used that year. This is an assumption that leads to all kinds of juggling of the estimates and appropriations as well as of the cost data. What is pointed to is this, that the new appropriations are made to buy things that are not provided for in some other way.

#### IV—ESTIMATED REVENUES AND BORROWINGS

The making of estimates of revenues and of the amounts to be raised by borrowing is a part of financial planning which is seldom considered frankly. In most cases no account is taken of the part of the program which has already been financed or which is to be financed by borrowing. Frequently no account is taken of the revenues which are set aside for special funds. In some states, fully fifty per cent of the revenues are lost sight of, and a larger or smaller proportion of the appropriations is also left out of the account. Whatever has been or may be the guiding policy, the data necessary to its consideration and review should be made available to legislators and the public.

#### THE NEED FOR COLLATERAL EXPENDITURE DATA

Lying back of the principle of control over the purse through representatives is the concept of democratic government,—that public institutions exist for the benefit of the governed; therefore every spending officer is held to be a trustee of the funds which are to be administered. Among the subjects of critical inquiry, therefore, when the plans and requests of spending officers are submitted to the representative body for their approval, are these:

- 1—When considering cost of work done,—has the public service been well managed?
- 2—When considering contracts and purchases,—have these been economically made?

- 3—When considering appropriations to spending officers or future drawing accounts,—are there stocks of goods on hand that may be used; have commitments been made in excess of past authorizations, etc.?
- 4—When considering money to be raised,—are the prospective revenues sufficient to cover fixed charges; what is the present financial condition,—is there a deficit to be financed or will there be a surplus which may be appropriated; how are capital outlays to be financed,—whether from revenues or borrowings; how are the outstanding debts to be met,—through sinking funds, by direct redemption or by revision?

Supporting an auxiliary part of the budget as collateral information, therefore, the spending officer needs to prepare for his own information, for the information of the executive (if he is to prepare and submit a budget) and for the information of members of the representative body who are charged with the duty of inquiry, discussion, approval or disapproval of requests for appropriation, the following:

- 1—"Unit cost data,"—cost of work measured in terms of units of results,—to answer questions of efficiency of management
- 2—"Unit price data,"—purchasing data,—to answer questions of economy of buying
- 3—"Stores reports,"—showing stocks on hand with indications of the minimum and maximum requirements of each class,—to answer questions as to whether it will be necessary to buy more or less than the quantities which will be needed for use during the year
- 4—"Financial statements" including: an "operation account,"—to answer whether the estimated revenue is sufficient to meet expenses and fixed charges; a "surplus account,"—to show whether there will be a surplus or deficit; a "balance sheet" or statement of assets and liabilities supporting the surplus account,—to show financial condition; a "public improvement program" and an "analysis of expenditures by character,"—to lay the foundation for deciding whether capital outlays are to be financed by revenues or borrowings; a "debt statement,"—to show outstanding maturities, debt

limit restrictions, etc.,—to lay the foundation for deciding on debt policy

- 5—A survey of the wealth, industries, resources and taxable properties of the state as a basis for measuring the proper cost of government, comparatively over long periods as a guide to decision on questions of policy

Critical consideration requires that results be reviewed in terms of "unit costs" of work; that things purchased for use be considered in terms of "unit prices"; that services be considered in terms of number and cost of employes of different grades and classes.

All this makes necessary the establishment of certain work standards as well as standards and specifications as to materials, supplies to be purchased and civil service grades and salaries. Without such standards and specifications it is impossible to form any comparative or absolute judgment as to the reasonableness of the requests for future support needed for a particular institution or work. If, for example, we know that the head of a particular hospital maintains so many beds for specific purposes, takes care of so many patients of a particular type, employs so many doctors, nurses, assistants, laborers, etc., of given grades, we have some basis for comparing his administration and his requests for money with the administration of the same institution for a prior period and of similar institutions in other parts of the state and in other states.

But critical review of such data cannot be effectively made in the hurry of a legislative session. Nor can the facts be developed as well by a legislative committee as by an executive who is to be held to answer personally when he appears before a body each member of which is privileged to ask questions and expects a frank answer when requests for appropriations are under discussion. Knowing that he will be held to explain, the executive has this in mind throughout the year. He utilizes the opportunity given by the relation of confidence existing between line officers and subordinates. In addition, the executive, through an independent staff organization, conducts a continuous review; he develops a system of accounts and reports, with a view to enabling him to act on information; and he builds up and critically reviews the fact data throughout the year. The whole attitude of the executive is changed. Instead of putting himself in a position to prevent legislative inquiry, for his own informa-

tion and protection he insists on having the "fact basis" for judgment regularly produced and brought under constant scrutiny of both line and staff advisers. Wholly aside from the advantage resulting from the preparation of a well-balanced plan, executive aid is needed by the legislature because it is only through putting responsibility on the executive that members may become reliably informed. It is only by having the executive before them that they can obtain correct answers to questions raised in the consideration of estimates.

Enough has been said to show that "estimates" of a large number of detached spending officers without central executive review may be and are likely to be useless as a basis for legislative judgment, and that the establishment of standards and specifications as to materials and personal service and the maintenance of cost and stores records which depend on current administration for their accuracy, completeness, and up-to-dateness are absolutely prerequisite to any effective budget making. In New York City and New York state the need for the standardization of salaries and grades in the civil service has been officially recognized but the progress of this work is painfully slow. In New Jersey, the legislature of 1916 which passed the Edge budget bill showed its appreciation of the place of standards and specifications by enacting a law providing for a complete system of purchasing for state offices and institutions. In accordance with the provisions of this law, standard supply specifications showing the nature and amount of the state's needs have been devised and submitted to bidders. In addition, the governor is given a staff to collect and review the facts before he submits his plan. With such data before him, the governor in reviewing the requests for appropriations under the new budget law can exercise a critical and comparative judgment and be in a position to answer in person or through a representative, the questions of members.

#### *The Appropriation Bill*

The estimates are not acts of appropriation but are designed for information only. The act of appropriation is another matter,—it is an authorization by law permitting spending officers to draw upon the public treasury. It is for the guidance of the treasurer, comptroller, and spending officers. Failure to distinguish between the proper functions of estimates and appropriations and attempts to set up the act of appropriation in such

a manner as to inform the legislature and the public about the work of government are responsible for much confusion about the budget.

The fundamental problem in setting up the appropriation bill is this: "How far are the spending officers to be controlled by detailed itemization of the sums allotted to them?" This is, of course, the problem of the segregated budget, about which there is so much misunderstanding. On this point a little historical review is necessary.

Several years ago when the public was aroused by the "muck rakers" to a realization that waste and graft were widespread in American government, it was discovered that much of the evil was due to the fact that administrative officers having lump sums of money at their disposal flung money about right and left to hire henchmen and fatten contractors. The palliative immediately offered in accordance with our historical traditions, was negative. The cry went up for an itemization of the officers' accounts at the treasury and a distribution of the amounts into twelve equal parts corresponding to the months of the year. This certainly did act as a check on graft. It prevented the administrator from using any unexpended balances for the purpose of hiring henchmen just before elections or from making contracts with political leaders for work never contemplated in the act of appropriation. As a palliative, the highly segregated act of appropriations was rather effective, and many who did not regard it as a satisfactory prophylactic accepted it temporarily on the ground that the results justified the drastic action.

Students of government who had deeper insight into the processes of budget making, however, had grave doubts about the finality of extreme segregation of items in the act of appropriation itself. To them it seemed that, however much the estimates and the supporting information of the "budget" as distinguished from the "bill" might be segregated, the subdividing of the drawing allotments to officers was an extreme measure directed against malpractices, rather than a remedy calculated to build up efficient administration. Practical administrators were not slow to see that detailed segregation of items of appropriation tied the hands of the good as well as the bad and prevented the able and efficient head of a department from disposing of his money to the best advantage. If, for instance, the act of appropriation decreed that he could have three stenographers at \$1,200 per annum and he needed one stenographer at \$1,800,

and an adding machine operator at \$1,000, he had to devise some scheme to evade the law, or else to cripple his office force by employing a type of person not suited to his requirements. Such an act tends to discourage the efficient officer and to produce lethargy in his administration. He is likely to say either: "How can I beat that provision?" or "What is the use?" Certainly no able man would accept responsibility in a private corporation if he knew that his hands were to be tied by infinite details in hiring employes and buying materials and that no mobility for exigencies would be tolerated.

Here then is the crux of the matter as far as the form of the appropriation bill is concerned: "How can we give the able administrator that freedom which is necessary to efficient action and at the same time safeguard the public funds?" The somewhat hackneyed, but true, answer is that no piece of legislation will do it all. The solution lies partly in law but mainly in the development of responsibility and publicity in our government. In other words, the form of the appropriation bill strikes right into the heart of our administrative and legislative practices. If we organize our government on the basis that no man or body of men can be trusted even when instruments of popular control are at hand, we can *prevent* things from being done, but we cannot invite the free play of creative ingenuity in administration. Whoever has surrendered all hope of securing efficiency in democracy should cling to the highly segregated budget. It may compel the officers to buy hay when they need wagons but it will prevent them from buying henchmen with the hay money!

But we need not accept the counsels of despair. There is a way that is marked by signs of promise if not by guarantees. We should abandon the high segregation of items in the appropriation bill by which the legislature after sixty or ninety days of superficial consideration attempts to nail the administration down to infinite details for one or two years to come. Experience has proved that negation is not a cure-all. In the place of extreme itemization we should have appropriations for departments and divisions in lump sums for specified objects such as personal service, maintenance, repairs, and permanent betterments, based upon the itemization set forth in supporting schedules and justified by the work-program. Then we should stipulate that the items shall be binding upon the administrative officer unless he can show cause to the governor for changes and transfers within reasonable limits, and, further, that such changes and

transfers and the reasons therefor shall be reported to the legislature with the next budget.

The question now arises as to the limits within which the spending officer shall be allowed to transfer and change the items set forth in the schedules embraced within the act of appropriation. This is a matter which calls for much technical discussion, but the provision of Governor Whitman's tentative budget of 1916 offers a suggestion.<sup>1</sup> The spending officer was to be forbidden to transfer money, from the schedule of "salaries regular" to "wages temporary," or from "permanent betterments" to "wages temporary," etc. The exact limits required by efficient administration will have to be determined by experience. It is not necessary to fling down all safeguards thrown around expenditures in order to give the able administrator a reasonably free rein.

The next question which arises is: "Under what conditions may the spending officer be permitted to change the items set forth in the schedules?" Here again Governor Whitman's tentative budget plan offers a suggestion. Section 4 of his proposed act of appropriation reads as follows:

"The several amounts enumerated in a list of proposed payments for services and expenses entitled 'schedule,' in this act and following an item of appropriation, indicate the initial plan of distribution of such appropriation and not additional moneys appropriated. A sum appropriated, with schedule, for personal service or for maintenance other than personal service shall be paid out only in accordance with the schedule therefor, unless it be modified as hereinafter provided. A plan for the revision of a schedule to provide for the distribution and apportionment, in a manner different from that set forth in the original schedule, of a sum so appropriated or the unexpended balance thereof, may be from time to time submitted in writing to the Governor. Where the appropriations relate to State institutions, any such plan may be submitted by the following authorities: For State prisons, by the Warden or Superintendent of a State's prison, or a hospital for the criminal insane, subject to the approval of the Superintendent of State Prisons; for a State charitable institution, by the Superintendent or head of such institution, subject to the approval of the board of managers or trustees of the institution; for institutions subject to the provisions of the Insanity Law, by the Superintendent or head of such institution, subject to the approval of the State Hospital Commission. In all other cases, the plan may be submitted by the commission, board or officer for whose department, office or functions the appropriation is made. If the Governor shall approve the plan, he shall transmit the same with his certificate of approval to the Comptroller, and the Comptroller thereafter, in the expenditure of such appropriation, shall be governed thereby. A plan may be withdrawn and amended to meet the Governor's objections, if any, and resubmitted.

<sup>1</sup> For the technical details of this balance sheet, see MUNICIPAL RESEARCH, No. 74, pp. 157-171, and forms pp. 204-207.

"A position established, or substituted by any such revision, within the competitive class of the classified civil service shall be filled in accordance with the Civil Service Law and Rules.

"Modifications of personal service schedules as provided in this act, shall be restricted as follows: (a) From salaries regular to salaries regular; (b) from salaries temporary to salaries temporary; (c) from wages regular to wages regular; (d) from wages temporary to wages temporary; (e) the amount expendable in any month for salaries of regular employees shall not exceed one-twelfth of the total amount available by the original schedule for salaries of regular employees; (f) the amount expendable in any week for wages of regular employees shall not be more than the pro-rata of the members' of working days in such week to the total number of working days provided by the original schedule line for the whole year; (g) the salary or compensation of a member of a board or commission, or other officer, at the head of a State department or office, or of any deputy of such department, board, commission or office, as specified in an original schedule of this act, shall be the salary or compensation of such member, officer or deputy for one year, notwithstanding the existing provisions of any other statute fixing the annual salary, or the compensation, at a different amount, except that such salary or compensation may be reduced but not increased by a revision of the schedule under this act."

In other words, the solution of the problem of the appropriation act calls for:

(1) Lump sum appropriations for specified classes of objects, such as "personal services," "supplies" and "materials"; "equipment," etc., with a distinction made between "expenses," "capital outlays," etc.

(2) Itemisation of the lump sum appropriations in appended schedules, said items to be binding on the administrator unless changes and transfers within limits are authorized by and in accordance with an established procedure

(3) Provision whereby changes in items of appropriation within limits may be made on the approval of the governor

(4) Provision for reporting all changes and transfers to the next session of the legislature.

#### REVENUE AND BORROWING MEASURES

The long practice of speaking about the appropriation bill as "the budget" has led most popular writers on the subject to ignore the question of revenues and taxation altogether; but it will be apparent on second thought that it is absurd to treat any document which omits reference to revenues altogether as a well-balanced budget. At all events, in these days when the pressure of expenditures on revenues has about reached the limit, it is highly unbusinesslike, to say the least, for the legislature to discuss and pass appropriation bills without considering,

<sup>1</sup>So in original; should be "number."



at the same time, the sources of income to meet the bills. Of course it is said by men in high places, who ought to know better, that the legislature should consider "the true needs of the government" and then raise the money to meet them, but any one thoroughly conversant with the condition of public finances is aware that with the growing demands upon the treasury it is impossible to decide wisely upon expenditures before the problems of income and taxation are taken into account. Some work may be wisely inaugurated if funds are ample, or postponed until a later day if they are not.

For this reason, every budget should contain in parallel columns the receipts from all sources for the previous two years and the estimated revenues for the coming year or biennium, as provided for by existing law. If it be said that the discovery of a surplus is merely an invitation to the legislature to devise new extravagances, the reply must be that it is a poor system of government that trusts to ignorance as the source of efficiency and economy. The truth is, that there is not much danger of any more surpluses considering the wide extension of governmental functions during the last decade and the increasing pressure for continued extension. On that account, the members of the legislature, as well as the spending officers, need before them a complete picture of the revenue situation while they are deciding upon the merits of the respective demands upon the treasury. The state of the revenue and the problems of taxation are as much a part of the basis for thinking about appropriations as the estimates themselves.

Although the spending officers are best equipped to state the needs of their respective departments, it does not follow that their opinions on revenues and taxation are of any more value than those of the ordinary member of the legislature. On the other hand, the governor, as leader of his party and spokesman of the state on great public questions, is entitled to speak as an authority in recommending revenue measures. If by law or practice he should be made responsible for revenue policies as well as other important political programs, questions of taxation would be injected into campaigns and candidates for the office of governor would be compelled to inform themselves on matters of finance.

Taxation strikes into questions of the distribution of wealth, the relations of classes, and the processes of private industry. To allow the governor to escape all responsibility for recommending revenue bills is to lose another opportunity for developing

methods that will help to define and clarify campaign issues. But leaving aside this larger question, it is apparent that intelligent budget making calls for a complete picture of revenues as well as expenditures as a basis for exercising critical judgment. \*

#### *The Debt and Sinking Funds*

It hardly seems necessary to say anything on the proposition that a complete budget requires an accurate and exhaustive review of the debt and sinking funds, showing tendencies over a long period of years—notwithstanding constitutional limitation on indebtedness. Those familiar with American finance know how common has been the practice of reducing taxes by borrowing either to cover current expenditures or to buy materials that will soon be worn out. The example of the city which issued fifty-year bonds to pay for second-hand fire hose is already a classic. Neither the legislature nor the citizen can form any sound judgment about estimates, revenues, or expenditures unless he has before him the debt statements analysed according to objects and set forth in a form designed to show tendencies over a long period and to permit of projections into the future on the basis of current laws and commitments. If the desire for a wisely planned system of finances does not compel the inclusion of the debt analysis in the budget, the pressure of taxation to meet the interest on the debt will bring it about in time. We cannot continue much longer on the assumption that almost anything can be pushed over into the debt or deficiency account while the public is not looking, on the cheerful assumption that later generations can readily carry the burden.

#### *The Balance Sheet for the State*

In order to round out the budget and encourage the legislature to think of public finances as a whole and in relation to tendencies over a period of years, there should be a complete summary showing assets and liabilities—sinking funds, stores, property, and valuable rights set over against debts and other liabilities. Of the technical details of this balance sheet it is not necessary to speak in this general survey, but it does not require the exercise of much accounting imagination to forecast a balance sheet that would perfectly mirror the financial condition of the state and form the foundation for a year to year consideration of policies involving public expenditures and public obligations.<sup>1</sup>

<sup>1</sup> For the technical details of this balance sheet, see MUNICIPAL RESEARCH, No. 74, pp. 157-171, and forms pp. 204-207.

*Wealth, Industries, Resources, and Taxable Property*

Mr. A. E. Sheldon, of the Nebraska Reference Bureau, a few years ago proposed what might be called a "social budget" and argued in a telling manner for including in the annual or biennial budget a survey of the state's resources that would show the relation of growing expenditures for various purposes to the increase in different forms of wealth and taxable resources. Undoubtedly this is a fruitful suggestion and should be taken into account. For example, the state may be spending a given sum for a particular work and there may be eloquent reason why the work in itself is worthy of support, but when it is discovered that the industry in question which the state is encouraging is on a steady decline or that the resources on which it is founded are being exhausted, the whole matter is to be viewed in another light. Without venturing into an extended discussion of this point it is sufficient to say that where the state comes into vital relations with private economy, the status of that economy should form a part of the report which is to serve as the foundation for financial and administrative action. Moreover, any sound revenue survey should include an account not merely of receipts, but of taxable resources. This is a view that not infrequently obtains in countries which have a budgetary method of controlling the finances. In Japan, for example, the economic and commercial condition of the realm is given a regular place in the budget speech.

## CHAPTER IV

### LEGISLATIVE PROCEDURE ON THE BUDGET

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When the materials described in Chapter III are all assembled in orderly form and the appropriation bill is prepared, what procedure is best calculated to secure effective legislative action? What method of action is most likely to arouse public interest and scrutiny and to develop that popular opinion which is the basis of responsible government? The final answer to these questions is not to be made at once, for prophecy is dangerous, but certain conclusions seem reasonably justified by American and English experience.

#### *Standing Committee Procedure*

We know from long practice what happens to reports, proposals, and estimates which are sent at once to standing or select committees, and it is safe to conjecture that the most carefully prepared executive budget, if transmitted at once to an ordinary legislative committee, will receive scant attention from individual members and no publicity worthy of note. Consider the fate of the federal "book of estimates" annually prepared in Washington, or Governor Whitman's "budget proposal" last year (1916).<sup>1</sup> We know that the regular committees take the proposals, with a secret good humor, slash them beyond recognition, carry on negotiations with powerful members or with other committees and log-rollers, and that the few majority members on the committee produce a measure which the party is asked blindly to support,—a measure designed to meet as many demands of the spoilsman as a fine calculation of the public temper warrants,—a party measure which is jammed through the legislature during the last days of the session under "gag rule" amid the smoke and roar of sham battles. What is accorded to the "opposition" at best is a chance to make a few stump speeches, it having been arranged that the orators shall have almost no information as a basis for attack. What is expected of those who are in a critical attitude is "silence, and little of that." Those informed about legislative procedure under the ordinary committee system need not be told that the

<sup>1</sup> See MUNICIPAL RESEARCH, No. 72, pp. 7-18.

best budget in the world prepared by the most competent executive is a futile performance if it ends in being a mere pious wish expressed to the irresponsible members of standing committees,—if it cannot be made the subject of free and full inquiry and discussion when it comes before the legislature with opportunity given to each member to become informed about it. The only way that this can be done is by taking up the plan submitted by the governor in committee-of-the-whole with the spending officers present.

#### *Committee-of-the-Whole Procedure*

The history of public finance in the United States condemns ordinary "standing committee" procedure on the budget and points to a process calculated to bring executive proposals and legislative action into the open daylight of public discussion, under such conditions that time and opportunity may be given for consideration. The legislature should not be permitted to entomb the budget in standing committee rooms and make it the plaything of those who would use it for purposes of patronage and yet have no responsibility for administrative results. The representative bodies, if they do not do so on their own initiative, should be required by constitutional enactment to consider it in committee of the whole for a stipulated number of legislative days long before the end of the session, with the governor and spending officers present to explain and defend their requests and to answer questions about their demands and their work-programs. Such a legislative procedure is the most vital part of budget making. The purpose of requiring the executive to prepare the budget is to make spending officers responsible for planning and for making public their plans before further authority is granted. If we stop here and do not provide the means whereby individual members of the legislature can find out what these plans are, if we put these plans in the hands of a standing committee to be made the subject of secret bargaining, the executive proposals will be hacked and mutilated beyond recognition, without anyone, even the governor, the members outside of the committee rooms, or the public ever finding out just what happened.

To provide an opportunity for members to find out what has been proposed, and to make spending officers responsible, it is thought that the following principles should govern:

- 1—A certain number of days each week, beginning early in the session, should be set aside for the consideration by

the committee of the whole, *first*, of the estimates in detail, one department after another, and *later*, of the plan as a whole with the proposed bills

- 2—At each session, one or more main heads of the estimates should be taken up and the spending officers whose departments are affected should be present to take part in the discussion of their requests and to give an account of their stewardship; and after discussion a vote should be taken on each spending officer's request, to get the sense of the committee
- 3—After the estimates have been gone through, then the budget as a whole should be taken up with the bills in committee of the whole and brought to a vote, after which the committee of the whole should rise and report
- 4—It should be understood that the governor may wait until the "estimates" have been discussed before submitting his appropriation and revenue bills for passage and that he may amend his budget proposals at any time before passage on the basis of suggestions developed during debate or of additional information, so that it will not be understood that such proposals are mere party measures, sealed and stamped, to be jammed through without regard to legislative discussion. In other words, intelligent debate is to be invited.

No doubt, it will be objected that debate in American legislatures is bound to be a farce, but it should be remembered that it must be a farce when bills coming from standing committees are declared to be the final word of the party leaders, and little or no opportunity is given to critical members to find out what is the import of the voluminous measures submitted for passage. Under such circumstances, the "opposition" members know that discussion is futile because undertaken at a disadvantage, and dissenting members of the "majority" are aware that they incur the charge of party treason if they lift their voices in criticism. The vice of this kind of a party system has been the reason for adopting a decentralized administration under continuing boards,—preferring irresponsibility which is "out of politics" to irresponsibility which is made the opportunity for organized plunder.

The purpose of the executive budget is to induct into our state governments the principle of responsibility to the people. But

to do this, the old form of legislative procedure,—developed to make irresponsible party government effective through log-rolling in the “standing committee” room, and the “gag rule” on the floor,—must be abandoned and a procedure adapted to giving “publicity” both to the acts and the plans of spending officers and to the resolves of representatives must be established. With an executive budget prepared in full knowledge that it will be openly and publicly discussed, there can be no “party” action as we know it. So far as the budget is concerned there are two parties—but they are made up on the one hand of members who will support the plan submitted or as subsequently amended by the executive and those who are against it. The budget is no longer a “party document” in final form as brought before the committee of the whole; it is an executive proposal which makes for discussion by affording an opportunity to any member to ask questions, develop information, and raise objections that may affect results. Through such a procedure we may reasonably look for some effective publicity on the budget and for something more than perfunctory legislative action. At all events, open handed dealing will be invited, and “dark room” committee procedure will be discouraged.

#### *Executive Participation in Legislative Discussion of Finances*

Added opportunities for publicity on finances are afforded by a procedure which calls for the participation of the governor and spending officers in the legislative consideration of the subject. At last, after years of misguided protests against proposals based on assumed encroachments on the sacred doctrine of the separation of powers, we have one state, which, in amending its constitution, is far sighted enough to see that the bringing of an executive before the bar of the legislature to explain what has been going on and to tell specifically what spending officers propose to do with funds, if granted, is not a commingling of authority which should cause us to despair of our free institutions.<sup>1</sup> On the contrary, there are those who have had the temerity to think that such a procedure has a vital significance,—that it is the one big principle of government which we have missed—one which is essential to the preservation of the fundamental political concepts of democracy.

The Maryland budget amendment adopted in 1916 declares that “the Governor and such representatives of the executive

<sup>1</sup>For text and discussion of the Maryland Amendment, see MUNICIPAL RESEARCH, No. 73, pp. 30-41, also Appendix to this volume.

departments, boards, officers and commissions of the State expending or applying for State's money, as have been designated by the Governor for this purpose, shall have the right, and when requested by either house of the Legislature, it shall be their duty to appear and be heard with respect to any budget bill during the consideration thereof, and to answer inquiries relative thereto." With the budget proposal an open document, published to the state and laid before open sessions of the legislature, and with the governor and his representatives participating in the consideration of finances, would it be too much to hope for the development of that public interest which is the very foundation of responsible government? Intelligent leadership on the part of the governor and informed members of the legislature would certainly be encouraged if not made inevitable.

#### *Legislative Action on the Budget*

Shall the legislature, even if committee-of-the-whole procedure be adopted, be permitted to *increase* and add to the executive appropriation bill as well as to reduce and eliminate items? This question runs to the root of our political practice. Undoubtedly popular temper is against restricting the state legislature to the mere reduction and elimination of executive estimates, although a large majority of the states permit the governor to veto items in the appropriation bills and, quite commonly, after the legislature has adjourned, when his word is final. A good argument could be made against allowing the governor to cut and slash appropriations after the close of the legislative session without ever being called to account for his action, but the public which refuses to give him any authority over financial matters *before* legislative action, seems quite content with giving him an irresponsible power to tear appropriation bills to pieces *after* they are passed. If there is no danger of "executive tyranny" in such an enormous power over appropriations after the legislature has adjourned, why should there be so much fear of throwing the burden of proof on the legislature which seeks to add to the requests of spending officers?

Cogent reasons may be advanced against limiting legislative action to the reduction and elimination of items in view of the fact that no provision is made for submitting issues to the electorate in case of a deadlock between the executive and the legislature. All that seems practicable under our system of state



government is the adoption of certain restrictions on legislative increases in appropriations proposed by the executive, such as :

- 1—No increase shall be made until the consolidated appropriation bill proposed by the executive has been duly considered and passed
- 2—Each increase should be for a specified object or purpose to be named in the act providing for it
- 3—Each act increasing the executive proposals must be passed by a majority of the whole number elected to each house and the yeas and nays must be called
- 4—Each such increase should be subject to executive veto in accordance with the regular provisions. The Maryland constitutional amendment provides that each supplementary appropriation act shall be accompanied by a tax or revenue provision sufficient to cover the additional cost imposed by it.

At all events, whatever may be the detailed safeguards thought desirable, it is certain that supplementary bills increasing executive proposals should be treated as extraordinary and call for a proceeding that means publicity and responsibility for the action of the legislature.

### *Conclusions*

The budget procedure here outlined in imperfect form calls for:

- 1—An accounting system that is founded on business principles and that presents full information as to work done and to be done, estimated on the unit cost basis; and a record system which produces clarity and precision in public business and can be used by an executive in assuming responsibility in financial matters
- 2—A budget document which is a perfect picture of the finances and resources of the state and of the requirements of all spending divisions of the government
- 3—A legislative procedure,—open and aboveboard,—which draws together the voting and the spending authorities in an honest consideration of public needs and public work
- 4—Staffs of men trained in budget making in all of its technical processes and capable of developing information that spells precision, accuracy, and comprehensiveness

*LEGISLATIVE PROCEDURE*

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- 5—A unified administrative system which will effect co-operation between the executive departments and collective responsibility for expenditures and work
- 6—The adoption of the technical accounting and recording processes of modern business corporations so that the state may be efficient.

## CHAPTER V

### MARYLAND'S EXECUTIVE BUDGET<sup>1</sup>

BY HON. EMERSON C. HARRINGTON, GOVERNOR

#### MR. CHAIRMAN AND GENTLEMEN:

A budget, whether it be an "executive budget," a budget by a board of public works, or by a special appointed budget commission or board of commissioners, is practically a new thing, at least in state government, and has not been so sufficiently tried out in any state in this country with which I am familiar as to place us in a position from experience to decide whether or not it may prove a success or a failure. I assume, however, that the manner of appropriation by the legislatures of the other states has been like my own in the past, of such a character, now that the rapidly increasing demands for the expenditures of money has gone beyond the revenues readily available, that it has created the necessity for a more business-like and a more intelligent system of appropriating the people's money, and in my own state, over-appropriation by the legislature created a crisis in our fiscal system and the question became so acute that the establishment of a budget system became the leading issue of our state political campaign of 1915, in which each one of the two great political parties vied with each other first, in the promulgation of a platform with the budget plank as the leading issue, and, afterwards, in attempting to convince the people that the successful redemption of this pledge would be more surely accomplished by entrusting it with the administration of the state government.

I will, I hope, be pardoned if in the discussion of this great issue, I shall have to speak in part of my own personal participation in this campaign, but I do so only because I have been so intimately connected with the inauguration of the executive budget in Maryland, that I shall find it impossible to relate the story of its establishment without a few personal allusions. May I not, therefore, as briefly as possible give some of the recent history of our state along the line of legislation that resulted in bringing about such a condition in the fiscal affairs of our state, that made the establishment of a budget system almost a neces-

<sup>1</sup>Address delivered at Conference of Governors, Washington, D. C., December, 14 to 16, 1916.

sity, made possible the passage of a bill by the legislature submitting to the vote of the people a constitutional amendment providing for such a budget system, of which experts had only hitherto dreamed, won the overwhelming endorsement of the people at the polls, and in my opinion makes possible the try-out of the executive budget plan under more favorable auspices than, from my information, seems possible under conditions existing elsewhere. Until a few years back all the money raised by our state by direct taxation was practically dedicated to our public schools, and the money raised by indirect taxation was amply sufficient to pay what is usually called the running expenses of the general government. But the progressive spirit which has finally swept over our whole country caught us at its very inception, and today there is little of advanced or radical legislation in Maryland that demands enactment, so that we feel like taking a breathing spell, as it were, and fully adjusting ourselves to conditions before moving forward again at so rapid a pace.

In 1908 we began our good roads movement upon a state-wide plan and with a complete state survey. The original plan was to connect every county seat by as nearly a direct route as possible with every other county seat, and all of them to be connected with Baltimore City, our great metropolis, also to connect up the county seats of all the adjacent counties with our national capital, and also the principal towns in the counties with the county seats. Today our entire system is very near completion.

In order to build these roads so rapidly we were compelled greatly to increase our bonded indebtedness, and then the upkeep or maintenance of these roads for which we fully provided from the start, has greatly taxed our resources.

Then we have had to build great asylums for the insane, for those afflicted with tuberculosis. Further, the great reform in the administration of penal institutions has called for greater expenditures of money. The increased demand for armories, the costs and expenses of a public Service Commission, of a Workmen's Compensation Board, of a Child Labor Bureau, of a State Tax Commission, of our agricultural colleges, and the increasing demands of the many hospitals being established in every county of the state, of different institutions for learning, of the many charitable and reformatory institutions for boys and girls, institutions for the deaf, dumb and blind, all of which our state has been aiding and assisting upon a larger scale in proportion to our

wealth than perhaps any other state in the union. All these demands taken together, with the manner of our legislation, when every senator and every delegate felt personally obligated to get what he could for his own section and county and let the others have what they wanted, the crisis was sure sooner or later to come, and notwithstanding the plain warning given in my report as the comptroller of the state treasury to the legislature of 1914, after the legislature adjourned it was found that it had appropriated, what to our state was a startling sum, nearly \$2,000,000 more than the revenues available for the running expenses of the state government.

In my report as state comptroller, I had given as close as it was possible to give the probable revenues, advised the strictest economy, and stated that every dollar of excess of appropriation over the previous legislature would mean a deficit to that extent. But no one took heed. The General Appropriation Bills for the state government, the Omnibus Bill, carrying vast appropriations to charitable and beneficent institutions, were practically made up the last few days, if not the very last day, of the session, and the rules were suspended and the bills passed, while very many special bills likewise carrying special appropriations, were passed in the closing hours, and all these bills were then up to the governor for action. Up to this time the Finance and Ways and Means Committees did not know, nobody knew or attempted to calculate the sum total of the money appropriated.

In our state the governor can veto a whole bill, he can veto special specific appropriations or items, but he cannot cut the items. The governor vetoed a few of the bills. It was a Democratic legislature, a Republican governor. Notwithstanding the governor's veto, as soon as it was possible to get hold of the Appropriation Bills and the many special bills which in themselves carried provisions appropriating over eight hundred thousand dollars, it was found that the legislature had appropriated \$1,555,000 more money than ever before, and there would be a deficit in the treasury before the next legislature approximating two million dollars.

In a public statement to the press I gave in detail the amount of the expenditures and the amount of the deficit which was sure to follow, advocated the establishment of a budget system and the passage of a constitutional amendment to that effect, and at the same time declared myself unequivocally as opposed to all "continuing appropriations." I do not know whether there

is such a system of legislation or not in other states, but in our own state there has grown up a system known as "continuing appropriations." Some legislator interested in any institution of learning, hospital, beneficent or charitable institution or organization would procure an appropriation for it, and would have it marked "annual," and it would go on forever, would not have to pass the gauntlet of the next legislature, and in a year or so the institution would ask for more and get more, and few, if any, of the present legislators would know of the old appropriation. Some of these continuing appropriations had been passed and arranged for over 100 years ago, so that with the special bills appropriating money, and with all these continuing appropriations, the *General Appropriation or Omnibus Bills* would be far short of showing the total expenses or appropriations of the state government. Several attempts had been made before to repeal those acts calling for continuing appropriations, but they had always "died-a-borning."

For behind the continuing appropriations all the lobbying elements, benefited interests, and forces of obstruction entrenched themselves for defence.

I announced my candidacy for nomination for the governorship, made the budget the principal issue, favored the abolishment of all continuing appropriations and opposed all special bills appropriating money, and advocated that all appropriations should be included in two bills, one for each of the two fiscal years, intervening between the adjournment of one legislature and the meeting of another. Upon these issues I won the nomination and succeeded in having the Democratic State Convention adopt them in its platform. The Republican platform endorsed the budget plank, and practically all the other issues raised. But the Democratic Convention went one step further and named a committee of the most distinguished men of the state, regardless of party, with Dr. Goodnow of the Johns Hopkins University, a great president of a great university, at their head, to frame a Budget Bill.

In the meantime the strain upon the treasury had become so great that the payment of all appropriations, except salaries, was behind many months. The state authorities, under the constitution, cannot borrow, so that the situation was critical from every standpoint. At the election in November I was elected governor.

The legislature, with both parties pledged to the budget and to the strictest economy, met. The first act of the legislature was to so organize that it guaranteed a saving of \$77,000.00 in the running expenses of the legislature itself. Continuing appropriations were abolished, and no special bill appropriating money was passed. The Budget Bill, after some little discussion or division on one point only, and that was whether it should be an executive budget or a Board of Public Works budget, was passed as drawn and recommended by the Goodnow Commission, an executive budget.

The people ratified the amendment in November last, so that we have in Maryland in reality what is known as the "executive budget." Under such emergencies did it originate. Under such auspices was it enacted, and is now about to receive its baptism of trial.

The amendment is brief, and I will briefly state its points.

The General Assembly shall not appropriate any money out of the treasury except with the following provisions:

Every appropriation bill must be a budget bill or a supplementary appropriation bill.

Within 20 days after the convening of the legislature, except in the case of a newly elected governor, and he has thirty days from his inauguration (although such time may be extended by the General Assembly at which the budget is to be submitted), the governor shall submit to the General Assembly two budgets, one for each of the two ensuing fiscal years.

Each budget shall contain a complete plan of proposed expenditures and estimated revenues for the fiscal year to which it relates and shall show the estimated surplus or deficit of revenue at the end of each year.

Accompanying each budget shall be a statement showing (1) the revenues and expenditures for each of the two fiscal years next preceding, (2) the current assets, liabilities, resources and surplus or deficit of the state, (3) the debts and funds of the state, (4) an estimate of the state's financial condition as of the beginning and end of each of the fiscal years covered by the two budgets above provided, (5) any explanation the governor may desire to make as to important features of any budget and any suggestion as to methods for the reduction or increase of the state revenue.

Each budget shall be divided into two parts and the first part shall be designated "Governmental Appropriations" and shall embrace an itemized estimate of the appropriations,

1. For the General Assembly as certified to the governor by the presiding officers of each house.
2. For the Executive Department.
3. For the Judiciary as provided by law and certified to the governor by the comptroller.
4. To pay and discharge the principal and interest of the debt of the State of Maryland in conformity with the constitution and laws made in pursuance thereof.
5. For the salaries payable by the state under the constitution and laws of the state.
6. For the establishment and maintenance throughout the state of a thorough and efficient system of public schools, in conformity with the constitution and laws of the state.
7. For such other purposes as are set forth in the constitution of the state.

The second part shall be designated "General Appropriations" and shall include all other estimates of expenditures.

The governor shall deliver to the presiding officer of each house the budget and a bill for all the proposed appropriations of the budgets, clearly itemized and classified. The presiding officer shall promptly cause said bill to be introduced therein and such bill shall be known as the "Budget Bill."

In case of an oversight or an emergency at any time before final action, the governor, with the consent of the General Assembly, may amend or supplement either of said budgets by delivering such amendment or supplement to the presiding officer and these supplements or amendments become a part of the original budgets, as an addition to the items of said bill or as a modification or a substitute for any item of said bill such amendment or supplement may affect.

The General Assembly cannot amend the Budget Bill so as to affect the state's obligations under the constitution nor the provisions made by the laws of the state for the establishment or maintenance of the public schools or the payment of salaries required to be paid by the State of Maryland by the constitution thereof.

The General Assembly may increase or diminish the items relating to the General Assembly and may increase, but not decrease, the items therein relating to the Judiciary.



In all other respects the legislature cannot increase any items of appropriation but they may strike out or decrease, with one exception, and that is they cannot decrease the salary of a public official during his term of office.

The budget bill as then passed by both houses becomes a law without the governor's signature.

Another provision of great importance is that the governor or anyone of the department heads designated by the governor has the right to appear and be heard in respect to any budget bills while they are being considered and still further it is made their duty to do so if requested by either house of the legislature, to answer inquiries relating thereto.

Another important provision is that neither house shall consider any other appropriations until the budget bills have been acted upon by both houses, and no other appropriation shall be valid except in accordance with the provisions following:

1. Every such appropriation shall be embodied in a separate bill limited to some single work, object or purpose, therein stated and this bill must provide in the bill the revenue necessary to pay the appropriation by a tax, direct or indirect, to be laid and collected as shall be decided in said bill. A majority in each house of the whole number elected is required to pass a supplementary bill and the yeas and nays must be recorded. By requiring the revenue to be provided in the bill places the responsibility, whether the tax be a direct or an indirect one.

Besides, all supplementary bills are to be presented to the governor and are subject to his veto under the same conditions as now apply.

Nothing, however, shall be construed to prevent the legislature under the same conditions and qualifications as now, from passing any bill to pay for any obligation of the State of Maryland under the provisions of Section 10 of Article 1 of the Constitution of the United States.

In our budget bill there is a provision that should the budget bill not be finally acted upon within three days before the expiration of the regular session, the governor can by proclamation extend the term but no other matter but the budget bill shall be considered except as to the costs.

Likewise, under this constitutional amendment, the governor is given full power to require all departments and heads to report to him and all institutions applying for or receiving state aid to

give such itemized estimates and information as and in such form as he may desire.

The governor has the power to provide for public hearings and to compel attendance of all necessary parties.

The legislature may enact such laws as may be found necessary from time to time to carry out the provisions of this constitutional amendment.

There is another provision that in the case of any inconsistency between any provision of this amendment and any other of the constitution, the provisions of this amendment shall prevail.

With the exception that it is stipulated that nothing in the amendment shall effect any obligation as to the public debt as provided for in Section 34 of Article 10 of our constitution, and providing further that the governor may as heretofore call an extra session of the legislature for the same purposes as now provided, and provided in such a case the legislature can consider any emergency appropriation or appropriations.

Such are the main features of our executive budget. As I have stated, this bill is practically almost in every respect as prepared by the Goodnow Commission. It was passed practically as drawn by them, the only amendments of importance being improvements. One was giving the legislature the right, under certain restrictions, to pass a supplemental bill by a *majority vote* of all the members elected, subject to the approval or veto of the governor, as heretofore provided, instead of the *three-fifths* majority of each house, without the governor's approval. It was thought best to give the governor the right to veto, for this would be no hardship, as the bill could still be passed over the governor's veto by receiving three-fifths majority in each house.

From a personal standpoint, as the chief executive of the state, I would have preferred a "Budget by our Board of Public Works," but this distinguished committee reported in favor of an "executive budget," and the arguments in its favor prevailed with the General Assembly, for they believed the advantages gained were paramount to the objections complained of, which, *in this country are more imaginary than real.*<sup>1</sup>

Let us first consider these objections to an executive budget. In our state the Budget Committee was limited by the platform of the party either to an executive budget or a Board of Public Works budget, and the committee was unanimous for the executive budget. A budget by the Board of Public Works would

<sup>1</sup> Italics are the author's.

have "the disadvantage of dissipating personal responsibility, and at the same time as the Board of Public Works in our state is selected would not necessarily place party responsibility." With us the Board of Public Works is composed of the governor, the comptroller of the state treasury, both elected by the people, and the state treasurer, elected by the legislature, and it has more than once happened in our state that the comptroller and treasurer were of a different political party from the governor. And it might readily occur that a governor having just been elected upon fresh issues by the people might not have any voice in the framing of the budget. So it was determined not to jeopardize the advantage of both political and personal responsibility, by placing the responsibility upon the executive of the state, for to the executive of the nation on the one hand, and to the executives of the states on the other, the people of our country are more and more looking for leadership and are more and more inclined to place upon them the full weight of party success or party failure.

I believe that the same objections to a Board of Public Works budget would apply to a budget by a budget commissioner or a budget commission.

Another plan which has received in some sections serious consideration is a "legislative budget." All the plans or bills which I have so far seen providing for a legislative budget fail to meet the full requirements of a real budget, in that it limits no responsibility, it carries with it no authority or prestige, it constitutes members of the legislature a permanent and paid commission to prepare and submit a financial plan to the legislature, with no restrictions, and when the legislature can act wholly independent of the commission. It permits the legislature to select some of their own number to become a paid commission to prepare a budget plan, and if enacted into law, this plan would more surely perpetuate invisible and irresponsible government. If the only purpose of a legislative budget, a commissioner budget or any budget is simply to place certain information before a legislative body, I respectfully submit that in practice the desired ends will not be achieved. We speak from sad experience. In our own state the comptroller of the treasury, in compliance with constitutional duty, submits to the legislature at its very beginning a report giving in circumstantial detail the estimated revenues for the ensuing fiscal year, and likewise the estimated necessary expenditures. In addition to that we have a Board of State

Aid and Charities, who make to the legislature a circumstantial, detailed report of the demands and needs of all institutions which either ask for or have hitherto been receiving state aid, and yet with all these aids and precautions, the demands for the appropriation of money by the state have so greatly increased and the custom of legislation has so prevailed or political exigency or necessity been so urgent that the members of the legislature feel that they must stand by their own local demands, and in order to be assured of their own success in this respect have had to concede the local interests or demands of others, and then again with most of the members being new and inexperienced and unacquainted with the intimate fiscal affairs of state, and with the usual influence and pressure brought to bear upon our Committees on Ways and Means and Finance, with the short time at their disposal for complete investigation, log-rolling has often prevailed, and the result in the end with us has usually been that the Appropriation Bills are passed on the last day of the session, under suspension of rules, and three-fourths of the members are totally unacquainted with their provisions, and over-appropriations have occurred, with no one feeling a personal responsibility, with the public unable to fix the responsibility, and with no one knowing until perhaps a month after the governor has finished signing, the sum total of the appropriations, and whether there is going to be a surplus or a deficit in the treasury.

*In our budget system the items of the budget can be reduced or eliminated, but not increased by the legislature. This limitation is fundamental in my opinion for any sound budget system.*<sup>1</sup>

The Goodnow Commission said that it must be conceded "that the weakness of all American financial methods, in the Congress of the United States as well as in the legislatures of the separate states, was to be found in the practice to which all American legislative bodies are addicted, of adding either to the amounts demanded by the administrative departments or to the items for which appropriations are asked." This plan has been eminently successful in Baltimore City, but I agree with the Goodnow Commission that a broader latitude should be given a legislative body in financial matters than is given a city council in municipal budget making, provided the latitude so given cannot be used in such a manner as to produce a deficit in the state's treasury, and, therefore, our budget plan provides for emergencies or contin-

<sup>1</sup> Italics are the author's.

gencies, and power is given to the legislature to initiate appropriations for purposes for which the governor has made no estimates. But our budget amendment fixes the responsibility for any derangement of the financial plans of the governor.

"It has accordingly framed the proposed Constitutional Amendment in such a way as to permit the legislature by a majority vote of all the members of each House, and subject to the usual provisions with regard to the approval or veto of the governor, to appropriate money for a purpose not included in the Governor's estimates, on condition that provision is made in the act appropriating, 'for the levy of a tax sufficient in amount to defray the expenses necessitated by such act of appropriation,' and this is qualified by the further provision that the legislature must first have acted on the budget bills of the governor.

In one respect the legislature is supreme and limited only by the constitutional limitations, and that is in the control of its own legislative expenses. Likewise the governor has no power over the estimates for the judiciary. These estimates taken from existing laws, are certified to him by the comptroller and he must include them in his budget. This provision is to preserve the independence of the judiciary. The legislature itself may increase them, but it cannot reduce them. I wish to be understood to mean that no reduction in the estimates made for the judiciary can be made by the legislature in an appropriation act, but the legislature can, in the usual way, subject to the limitations of the constitution, by an act not an appropriation act change the provisions made by the law for the courts, and the comptroller, when the next budget is made, must certify the estimates to the governor as provided by law.

The governor is limited in many respects in his estimates. He must make provision for the state's debt for salaries payable by the constitution and laws of the state, for a free public school system as provided by law, and for such other purposes as set forth in the constitution.

The legislature is likewise limited. It cannot amend the Budget Bill so as to affect the state's debt. It cannot reduce the salaries of public officials during their term of office, the rule of our constitution, nor can it alter in the Budget Bill the estimates of the free school system of the state.

The object of our budget amendment which it was the intention of the framers to accomplish, and which I believe it will

accomplish; I cannot more forcibly state than is stated in the report of the Goodnow Commission.

First:

To impose upon the governor the sole responsibility, within the limits of the constitution, and the provisions of existing law, of presenting to the legislature a complete and comprehensive statement of the needs and resources of the state based upon—

a.—Estimates made by those applying for moneys.

b.—Evidence brought out at public hearings on those estimates,—and

c.—Administrative revision by the governor of all estimates except those for the legislature and the Judiciary and for the purposes for which provision has been made by the constitution and existing laws.

Second:

To make it impossible for the legislature so to change the plans proposed by the governor as to produce a deficit—but,

Third:

To permit the legislature to make provision for any purpose not included in the governor's plan on the condition that it provide also for the revenue which the accomplishment of its purpose necessitates.

With proper provision for the passage of any legislation that will protect our contractual obligations or outstanding obligations, such is our "Budget Law." At the last general election there were 77,478 votes cast for to 37,100 against, so that now it is a part of the constitution itself.

The initial trial will come at the convening of the next legislature. I must confess I look with some degree of anxiety and perhaps nervousness at its coming and at the great burden and responsibility imposed upon me, and especially as the track in this country is almost unbroken. The question might be asked what assistance or aid has been provided for the executive for the great task imposed. None has been provided specifically, but the amendment gives full power and the governor has an ample contingency fund for all necessary purposes until the meeting of the next General Assembly. Besides, I shall have the services and assistance of a very able Board of State Aid and

Charities, whose advice and help will be at my disposal and which department has gathered and collated valuable details of all institutions which have heretofore received the assistance of the State.

The last legislature passed the bill for a constitutional amendment unanimously. It was not a party question. Will succeeding legislatures feel so kindly? I cannot tell.

The last legislature in our state was a remarkable one, and it may be no criterion. "The Budget System, Economy and Retrenchment and Reform in Legislative Procedure" was the slogan of the campaign and endorsed by all political parties. The last legislature reduced its own running expenses by about \$30,000.00. It wiped out or repealed all continuing appropriations. The Finance and Ways and Means Committees invited the governor, the treasury officials and the Board of State Aid and Charities to sit with them at their hearings. No special bills appropriating money were passed. These committees with the revenues fully before them tabulated and considered, passed the appropriation bills and kept the appropriations within the limits of the revenues. An attempt at the last moment was made to depart from the plan and raid the treasury, but the chairmen of the two committees were giants of strength and threw on the flood light of publicity and the effort failed. There were no extra allowances so common before. All went by the board.

Some of the members, a great number of employes, and quite a few who could not be considered employes, including some of the daily newspaper reporters at previous sessions had received extra compensation or been voted lump sums of money. But the pledges had been too specific and when the effort to depart from these pledges was exposed to the spot light, aided and assisted by a fearless and zealous daily press, those backing this movement were overwhelmingly defeated.

It might be said if such things could be done by the legislature, there would be no need of the budget. But there is absolute need. Reform has its ebbs and flows. *It had better be written in the constitution.* Besides the amount of the appropriations in every state of the Union, in comparison with what it used to be, has become so great that the budget plan is the only sensible, business-like way of legislation. The budget plan is sure to come in the legislature at Washington, as well as in every state of the Union. We may differ as to form.

But I believe that in the end the executive budget will meet the consensus of general approval.

The executive budget has been endorsed by the leading fiscal experts of the country, and by many committees appointed to investigate the whole subject of budget making and has won notable converts to its side.

President Taft urged the executive budget in a special message to Congress on February 26, 1913.

The New York Constitutional Convention endorsed it by a vote of 132 to 4.

The Chamber of Commerce of the United States, composed of representatives of the principal commercial bodies of the county, advocate the executive budget.

Mr. Fitzgerald, chairman of the Committee on Appropriations of the House of Representatives, while once opposed, on June 26, 1915, went before the New York Constitutional Convention at Albany and put himself on record as favoring the executive budget. The reasons given by him are so apt that I take the liberty of quoting him in part. He said:

"We ought to have some way in the system of our government to fix direct responsibility and you cannot fix responsibility if the power is too greatly scattered. I would put it in the executive. I would make him *responsible* at the outset. Some persons object that we should not deprive the representatives of this right to loosen up the purse strings, but the universal condition in this country today is not what must safeguard the rights of the people to get money for things. The whole curse of our condition is that everybody is doing his utmost to get it and succeeds.

"Now, if there were some way by which that could be stopped, it would do what is done in the government where they had a responsible government with a budget system."

By an executive budget the whole plan at an early date, by one who has had full opportunity for investigation and whose responsibility is in the open, is placed before the legislature and before the people of the state, while under the present system, there is no plan; there is no well-defined program; there is nothing to criticise, because these appropriation bills now are not made up and do not take definite form, until too late for any intelligent or effective criticism. The public does not know their contents and few members do outside of one or two men who control the conduct of the bill.



I know it has been said that the giving of such power to the governor "smacks of monarchy and makes him a dictator." In this country there need be no fear of that, no fear that the executive budget will make him an invincible power. Such will not be the case. It can be a case of weakness rather than strength. With our amendment he has to come in the open forum and defend his recommendations. Everything is in the limelight and invisible or irresponsible government will become a thing of the past. There at least need be no fear in my own State of Maryland of any governor becoming a dictator or perpetuating himself in power, for no governor since the Civil War has ever been re-elected in our state.

I have endeavored, with the short notice given me, to give you as clear an exposition of our budget plan as I possibly could, and the reasons for the adoption of an executive budget.

It is now up to the governor to make good and fulfill the expectations of the people, and to justify the beneficent results predicted by those favoring its enactment.

Our budget will undoubtedly revolutionize our legislative procedure. It ought to shorten the session of the legislature. If properly prepared it will place the fiscal affairs of our state upon the soundest basis and ensure a pure business administration in all branches of the state government. Such is our hope, and in its realization we do not expect to fail.

I am confident that the executive budget in our state at least is with us to stay.

I thank you, gentlemen, for your patient hearing.

**APPENDIX**  
**THE TEXT OF THE MARYLAND BUDGET**  
**AMENDMENT**

## THE TEXT OF THE MARYLAND BUDGET AMENDMENT

The full text of the amendment to the constitution of Maryland for an executive budget reprinted from *Municipal Research*, No. 73 (pp. 37-39), follows:

### PROPOSED AMENDMENT TO THE CONSTITUTION OF MARYLAND FOR EXECUTIVE BUDGET

(Passed March 28, 1916.)

AN ACT to propose an amendment to Section 52 of Article III, title Legislative Department, of the Constitution of this State, regulating the making of appropriations by the General Assembly of Maryland in regular session, and to provide for the submission of said amendment to the qualified voters of this State for adoption or rejection.

Section 1. Be it enacted by the General Assembly of Maryland (three-fifths of all the members of each of the two houses concurring), that the following be and the same is hereby proposed as an amendment to Section 52 of Article III, title Legislative Department, of the Constitution of this State, the same, if adopted by the legally qualified voters of the State, as herein provided, to become Section 52 of Article III of the Constitution of Maryland.

Sec. 52. The General Assembly shall not appropriate any money out of the Treasury except in accordance with the following provisions:

#### Sub-Section A:

Every appropriation bill shall be either a Budget Bill, or a Supplementary Appropriation Bill, as hereinafter mentioned.

#### Sub-Section B:

First. Within twenty days after the convening of the General Assembly (except in the case of a newly elected Governor, and then within thirty days after his inauguration), unless such time shall be extended by the General Assembly for the session at which the Budget is to be submitted, the Governor shall submit to the General Assembly two budgets, one for each of the ensuing fiscal years. Each budget shall contain a complete plan of proposed expenditures and estimated revenues for the particular fiscal year to which it relates; and shall show the estimated surplus or deficit of revenues at the end of such year. Accompanying each budget shall be a statement showing: (1) the revenues and expenditures for each of the two fiscal years next preceding; (2) the current assets, liabilities, reserves and surplus or deficit of the State; (3) the debts and funds of the State; (4) an estimate of the State's financial condition as of the beginning and end of each of the fiscal years covered by the two budgets above provided; (5) any explanation the Governor may desire to make as to the important features of any budget and any suggestion as to methods for the reduction or increase of the State's revenue.

Second. Each budget shall be divided into two parts, and the first part shall be designated "Governmental Appropriations" and shall embrace an itemized estimate of the appropriations: (1) for the General Assembly as certified to the Governor in the manner hereinafter provided; (2) for the Executive Department; (3) for the Judiciary Department, as provided by law, certified to the Governor by the Comptroller; (4) to pay and discharge the principal and interest of the debt of the State of

Maryland in conformity with Section 34 of Article III of the Constitution, and all laws enacted in pursuance thereof; (5) for the salaries payable by the State under the Constitution and laws of the State; (6) for the establishment and maintenance throughout the State of a thorough and efficient system of public schools in conformity with Article VIII of the Constitution and with the laws of the State; (7) for such other purposes as are set forth in the Constitution of the State.

Third. The second part shall be designated "General Appropriations," and shall include all other estimates of appropriations.

The Governor shall deliver to the presiding officer of each house the budgets and a bill for all the proposed appropriations of the budgets clearly itemized and classified; and the presiding officer of each house shall promptly cause said bill to be introduced therein, and such bill shall be known as the "Budget Bill." The Governor may, before final action thereon by the General Assembly amend or supplement either of said budgets to correct an oversight, or in case of an emergency, with the consent of the General Assembly by delivering such an amendment or supplement to the presiding officers of both houses; and such amendment or supplement shall thereby become a part of said budget bill as an addition to the items of said bill or as a modification of or a substitute for any item of said bill such amendment or supplement may affect.

The General Assembly shall not amend the Budget bill so as to affect either the obligations of the State under Section 34 of Article III of the Constitution, or the provision made by the laws of the State for the establishment and maintenance of a system of public schools, or the payment of any salaries required to be paid by the State of Maryland by the Constitution thereof; and the General Assembly may amend the bill by increasing or diminishing the items therein relating to the General Assembly, and by increasing the items therein relating to the judiciary, but except as hereinbefore specified, may not alter the said bill except to strike out or reduce items therein, provided, however, that the salary or compensation of any public officer shall not be decreased during his term of office; and such bill when and as passed by both houses shall be a law immediately without further action by the Governor.

Fourth. The Governor and such representatives of the executive departments, boards, officers and commissions of the State expending or applying for State's money, as have been designated by the Governor for this purpose, shall have the right, and when requested by either house of the Legislature, it shall be their duty to appear and be heard with respect to any budget bill during the consideration thereof, and to answer inquiries relative thereto.

#### Sub-Section C: Supplementary Appropriation Bills:

Neither house shall consider other appropriations until the Budget Bill has been finally acted upon by both houses, and no such other appropriation shall be valid except in accordance with the provisions following: (1) Every such appropriation shall be embodied in a separate bill limited to some single work, object or purpose therein stated and called herein a Supplementary Appropriation Bill; (2) Each Supplementary Appropriation Bill shall provide the revenue necessary to pay the appropriation thereby made by a tax, direct or indirect, to be laid and collected as shall be directed in said Bill; (3) No Supplementary Appropriation Bill shall become a law unless it be passed in each house by a vote of a majority of the whole number of the members elected; and the yeas and nays recorded on its final passage; (4) Each Supplementary Appropriation Bill shall be presented to the Governor of the State as provided in Section 17 of Article II of the Constitution and thereafter all the provisions of said Section shall apply.

Nothing in this amendment shall be construed as preventing the Legislature from passing at any time in accordance with the provisions of Section 28 of Article III of the Constitution and subject to the Governor's power of approval as provided in Section 17 of Article II of the Constitution an appropriation bill to provide for the payment of any obligation of

the State of Maryland within the protection of Section 10 of Article 1 of the Constitution of the United States.

**Sub-Section D: General Provisions:**

First. If the Budget Bill shall not have been finally acted upon by the Legislature three days before the expiration of its regular session, the Governor may, and it shall be his duty to issue a proclamation extending the session for such further period as may in his judgment be necessary for the passage of such Bill; but no other matter than such Bill shall be considered during such extended session except a provision for the cost thereof.

Second. The Governor for the purpose of making up his budgets shall have the power, and it shall be his duty, to require from the proper State officials, including herein all executive departments, all executive and administrative offices, bureaus, boards, commissions and agencies expending or supervising the expenditure of, and all institutions applying for State moneys and appropriations, such itemised estimates and other information, in such form and at such times as he shall direct. The estimates for the legislative department, certified by the presiding officer of each house, of the judiciary, as provided by law, certified by the Comptroller, and for the public schools, as provided by law, shall be transmitted to the Governor, in such form and at such times as he shall direct, and shall be included in the budget without revision.

The Governor may provide for public hearings on all estimates and may require the attendance at such hearings of representatives of all agencies, and of all institutions applying for State moneys. After such public hearings he may in his discretion revise all estimates except those for the legislative and judiciary departments, and for the public schools as provided by law.

Third. The Legislature may, from time to time, enact such laws, not inconsistent with this Section, as may be necessary and proper to carry out its provisions.

Fourth. In the event of any inconsistency between any of the provisions of this Section and any of the other provisions of the Constitution, the provisions of this Section shall prevail. But nothing herein shall in any manner affect the provisions of Section 34 of Article III of the Constitution or of any laws heretofore or hereafter passed in pursuance thereof, or be construed as preventing the Governor from calling extraordinary sessions of the Legislature, as provided by Section 16 of Article II, or as preventing the Legislature at such extraordinary sessions from considering any emergency appropriation or appropriations.

If any item of any appropriation bill passed under the provisions of this Section shall be held invalid upon any ground, such invalidity shall not affect the legality of the Bill or of any other item of such Bill or Bills.

Sec. 2. And be it enacted, by the authority aforesaid, That the said foregoing Section hereby proposed as an amendment to the Constitution shall at the next ensuing general election being the presidential and congressional election, to be held on the Tuesday next after the first Monday of November, nineteen hundred and sixteen, be submitted to the legal and qualified voters of the State for their adoption or rejection in conformity with the directions contained in Article XIV of the Constitution of this State, and at the said election the vote on said proposed amendment to the Constitution shall be by ballot, . . . . .

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THE STATE MOVEMENT FOR EFFICIENCY  
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# THE STATE MOVEMENT FOR EFFICIENCY AND ECONOMY

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## INTRODUCTORY NOTE

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Real scrutiny of administrative methods and organization in the United States is a product of the past decade. Until recently, political study in this country centered about the sources and distribution of the powers of government rather than the methods governing their use. Thus with public attention directed toward the field of constitutional adjustment, with political theory still under the influence of the era of the War for Independence, with the energies of the population absorbed in the problems of exploring and organizing a virgin continent, it was not strange that administrative methods grew without plan or precision. Business and government knew no principle of administration other than "rule of thumb."

Recent attention directed toward the study of administration and administrative methods has proceeded from no abstract theory. It has evolved from a succession of natural causes. The development of industry has demanded the functioning of government in new and enlarged fields. The consequent increase in the cost of government pressed upon revenues until the alternative was created of narrowing the scope of public activity or seeking reorganizations in the machinery of government in the interests of economy. Hence the measurement of administrative services, the surveys, the scrutiny of methods and the coming of the specialist in administrative methods.

Perhaps the most informing indication of the comparative novelty in America of scientific administration is in the distribution by years of the literature appearing which concerns scientific management, efficiency and economy both as applied to business and to government. Prior to 1892 only five articles were listed in Pool's Index which suggest the application of standards of efficiency to public and private administration. During the decade following 1892 three were listed while in the four years following 1902 the attention to the subject still seemed to be remote and intermittent. In private business there was only one significant break in the silence between the publication in 1832 of a volume on "The Economy of Manufactures" written by Charles Babbage, an eminent mathematician, and the coming of the Taylor cult. This exception was an article which appeared

in the early eighties by Henry R. Towne of the Yale and Towne Manufacturing Company.

The accepted pioneer in the scientific management field is Charles W. Taylor who first set forth a statement of his principles of scientific shop management in a paper read before the American Society of Mechanical Engineers in 1903 (Shop Management, in Transactions of A. S. M. E., v. 14). It is significant that Mr. Taylor's first statements concern methods and results. No attempt was made at that time to develop a theory of scientific management. In fact Mr. Taylor has stated that scientific management is not a theory applied to practice but is a set of practices out of which a theory has grown. In the course of a few years Mr. Taylor gained a large number of followers and a systematization of his ideas has taken place.<sup>1</sup>

While the scientific management movement as developed in private business has become closely identified with the same movement in government, the latter cannot be said to have directly resulted from the former. The first direct connection between the two seems to have been the attempt to introduce the Taylor system into a government arsenal at Watertown in 1911.<sup>2</sup> With this exception the indebtedness of government to private business in developing the efficiency movement is not easy to establish. Rather, it seems that a movement for greater efficiency in governments has progressed during the same years but along different lines.

One of the first real appreciations of the problem of improved public administration appeared in an article published in the *Political Science Quarterly* in 1887 by Woodrow Wilson. This essay, entitled "Study of Administration," was a brilliant appeal to students of government to give more attention to the methods of public administration. It asserted that the application of civil service to administration could not accomplish all that its zealous supporters were at that time claiming. It was set forth that the organization itself must be studied, its methods tested, and its technique based upon sound principles. The writer clearly asserted the reality of a science of administration which

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<sup>1</sup> For an admirable critical study of the efficiency movement as it has appeared in published form see "The Literature of Scientific Management," by C. Bertrand Thompson in a volume compiled by the same author and entitled, "Scientific Management," Harvard University Press, 1914.

<sup>2</sup> See the Hearings of the Special Committee of the House of Representatives to Investigate the Taylor and other Systems of Shop Management, Government Printing Office, Washington, 1912.

would yield rich fruits for the patient investigator. The distinction now commonplace between those agencies of the government which determine policy and those charged with their execution was pointed out, with a tempered emphasis upon the need for the elimination of partisanship from the latter. The difficulty of drawing this line of distinction was thus expressed: "No lines of demarcation, setting apart administrative from non-administrative functions, can be run between this and that department of government without being run up hill and down dale, over dizzy heights of distinction and through dense jungles of statutory enactment, hither and thither around 'ifs' and 'buts,' 'whens' and 'howevers,' until they become altogether lost to the common eye not accustomed to this kind of surveying, and consequently not acquainted with the use of the theodolite of logical discernment" (p. 211). A demand for the study of administration in the higher institutions of learning was made with a prophetic suggestion of the modern training for public service.

During the twenty years following this, little was done in the way of improved administration through scientific study with the exception of the beginnings made in the study of municipal government and administration and the development of the study of administrative law by Frank J. Goodnow.

Since 1906, however, the study of public administration has made such marked progress that no study of all of its countless manifestations can be attempted here. With the establishment of the New York Bureau of Municipal Research in 1906 began the formation of a large number of private and public bureaus for the scientific study of administration.<sup>1</sup>

The application of efficiency to city government has claimed the attention of many of the most capable public men of the past few years with a marked improvement of municipal government as a result. The issue has likewise been staged for the national government by such studies as that of the Taft economy and efficiency commission. Interest, it seems, lagged only as regards the government of the states. But that such interest is now becoming apparent is evidenced in a number of ways. Not the least of these indications has been the formation of a large number of state agencies charged with the duty of investigating and recommending improvements in administration. It is a summary of the work done by these bodies, with some considera-

<sup>1</sup> For a list of these see MUNICIPAL RESEARCH, No. 77.

tion of the methods used and the results attained, that this volume seeks to supply.

This review was written by Mr. Raymond Moley, A. M., Instructor in Political Science in Western Reserve University, formerly of the Training School for Public Service. It is issued as a number of MUNICIPAL RESEARCH because of the need for such a compilation and summary of the works of the various state agencies created during the past few years to promote better methods in the administration of public affairs.

## CHAPTER I

### STATE EFFICIENCY AND ECONOMY COMMISSIONS

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The formation of commissions, boards and departments, having as their purpose the reorganization of state government in the interests of efficiency and economy, dates back to the year following the appointment of the Taft economy and efficiency commission for the investigation of the federal administration. The first state agency created for this purpose was the board of public affairs of Wisconsin in 1911. The New Jersey and Massachusetts commissions were created in 1912, while in the following year agencies for a similar purpose were established by legislative acts in four more states. In 1915 four commissions were established; in 1916, one; and in 1917, two.

It should be understood that the commissions considered in this bulletin constitute only a portion of the agencies recently created in the states, which have had as their function the improvement of state administration. A number of states have created commissions to study state expenditures and budgetary procedure while innumerable attempts have been made by the formation of commissions to hunt graft and corruption. We shall consider only those commissions which have actually made investigations and recommendations concerning the structure and methods of administration.

LIST OF COMMISSIONS IN CHRONOLOGICAL ORDER

The following commissions, departments and boards created for the investigation of state administration are included in this review. In each case the official title and the date of creation are given:

- The State Board of Public Affairs of Wisconsin, July 6, 1911.
- The Economy and Efficiency Commission of New Jersey, April 1, 1912.
- The Commission on Economy and Efficiency of Massachusetts, June 6, 1912.
- The Committee of Inquiry of New York, January 6, 1913.
- The Department of Efficiency and Economy of New York, April 14, 1913.
- The Joint Committee on Retrenchment and Reform of Iowa, February 6, 1913.
- The Efficiency and Economy Committee of Illinois, April, 1913.
- The Economy and Efficiency Commission of Pennsylvania, July 25, 1913.
- The Efficiency and Economy Commission of Minnesota, October, 1913.
- The Commission to Investigate the Advisability of Consolidating Certain State Boards and Commissions and to Investigate the Public Health Laws of Connecticut, February 9, 1915.
- The Legislative Investigating Committee of Alabama, February 13, 1915.
- The Survey Committee of State Affairs of Colorado, February, 1915.
- The Efficiency and Economy Committee of Kansas, March 20, 1915.
- The Committee on Economy and Efficiency of Virginia, March 16, 1916.
- The Commission of Seven Business Men of Oregon, February, 1917.
- The Efficiency Commission of West Virginia, March, 1917.

In purpose, method of selection, policies followed, and results accomplished, these agencies have varied in many respects.

Three were permanent state departments with considerable appropriations granted by the legislature. Their work concerned in large part routine matters such as budgetary investigation and special studies requested by governor or legislature. Others were temporary commissions or committees of legislatures appointed usually by the legislature itself or by the governor or both. A few were created by action of the governor alone. The appropriations granted varied from a few hundred dollars to a total of one hundred and fifty thousand dollars.

THE STATE BOARD OF PUBLIC AFFAIRS OF WISCONSIN

*Laws Creating and Continuing the Board*

The state board of public affairs of Wisconsin was created by act of the state legislature for a period of two years. (Chap. 583, Laws of 1911.) The law became effective July 6, 1911. The board met soon afterward and officially organized.

The board thus created consisted of seven members, four *ex officio* and three appointed by the governor and confirmed by the senate. The *ex officio* members were the governor, the secretary of state, the chairman of the senate finance committee and the chairman of the assembly finance committee. The board was continued for a period of three years by legislation approved July 31, 1913. (Chap. 728, Laws of 1913.) Two members were added to the board by the new legislation, namely, the president *pro tem* of the senate and the speaker of the assembly. The laws creating and continuing the board provided for no compensation for the board members except their actual traveling expenses. For the first period of two years a sum of \$30,000 was appropriated. The law continuing the board provided that the expenditure for additional duties placed upon it by the new legislation, should not exceed \$20,000 annually, and that these duties should be completed by December 1, 1914. There was also provided the sum of \$20,000 for accounting and budgetary work during the year ending June 30, 1915 and \$40,000 for the remaining year.

The board was continued by the legislature of 1917 for two more years. During the 1917 session of the legislature, several reports pertaining to the budget were made. In addition to the investigations mentioned in the list following, the mother's pension law was studied and its operation surveyed by the board, but the report on this subject had not been published when this review was closed. According to the plans of the board, the next two years' work will be devoted to administrative reform.

*Duties of the Board and Its Personnel*

The duties of the board were enumerated in the laws cited above as follows:

(a) *Chapter 583, laws of 1911.*

- (1) To prepare a budget report.
- (2) To install uniform cost and accounting systems in state departments and institutions.
- (3) "To investigate (a) the materials and resources of the state and (b) to promote their greatest use and highest development, espe-

- cially through home and farm ownership, co-operation, publicity, immigration and settlement; (c) to investigate the cost and standards of living within the state; (d) the difference between the amounts which producers and dealers within and without the state receive for their products, and the amounts which consumers pay therefor; and (e) the measures that may be adopted to reduce this difference, and to provide for more economic distribution of products and commodities.
- (4) "To co-ordinate by mutual agreement with the several public bodies, their investigations, and to provide for such additional investigations as may be necessary to carry out the purposes" of Chapter 583.
  - (5) To co-operate generally with other state departments and with departments of the federal government in making the required investigations.
  - (6) To publish reports and make recommendations to the legislature.
- (b) *Chapter 728, laws of 1913.*
- Chapter 728 enumerates duties to be performed by the board, additional to the duties enumerated in chapter 583, as follows:
- (1) To investigate the feasibility of a central board of control for all public educational institutions.
  - (2) To investigate the efficiency and cost of state printing.
  - (3) To make surveys of the
    - a. University of Wisconsin
    - b. State normal schools
    - c. High schools of the state
    - d. Training schools for teachers
  - (4) "(a) To investigate duplication of work of public bodies and (b) the efficiency of the organization and administration of such public bodies; (c) formulate plans for the greater co-ordination of such public bodies and the improvement of the state administration in general."
  - (5) To complete investigations previously commenced by the board under chapter 583, laws of 1911.

The personnel of the board has been as follows:

1911-1913

Governor Francis E. McGovern  
Secretary of State, James A. Frear  
Chairman Finance Com. Senate, A. W. Sanborn  
Chairman Finance Com. Assembly, R. J. Nye  
W. H. Hatton  
W. H. Hanchett  
John Humphrey

1913-1915

Governor Francis E. McGovern  
Secretary of State, John S. Donald  
President Pro Tem of the Senate, H. C. Martin  
Speaker of the Assembly, Merlin Hull  
Chairman Finance Com. Senate, George E. Scott  
Chairman Finance Com. Assembly, R. J. Nye  
W. H. Hatton  
A. W. Sanborn  
John Humphrey

*Plan of Work*

The plan of the work has been as follows: (a) Definite plans for each specific investigation or study required to be conducted were approved by the board before the work was commenced.



- (b) Periodical reports of the progress on each piece of work undertaken for the board were required and made to the board.
- (c) In no case did the board rely solely upon the special investigators engaged for information upon which to base conclusions or recommendations. Effort was made in each instance to secure all the facts through reports of the special investigators, observations, special hearings and through the advice and suggestions sought and received from men prominent in fields reported by the respective investigations and surveys conducted.

### *Investigations and Surveys*

Eighteen separate and distinct investigations and surveys of as many different subjects were conducted by this board. Some of these investigations and surveys were conducted by the board acting alone; others were conducted jointly with other state departments or institutions and some were conducted by other state departments or institutions at the request of the board.

Following is a list of the most important subjects and institutions investigated and surveyed, classified under the general headings:

- (A) Investigations and surveys designed to promote social and economic development, and
  - (B) Investigations and surveys designed to attain greater efficiency in state administration:
- (A) Investigations and surveys designed to promote social and economic development
    - (1) Farm tenancy in Wisconsin
    - (2) Rural credit conditions in portions of Wisconsin
    - (3) State loans to farmers
    - (4) Distribution of Sheyboygan county cheese
    - (5) Distribution of Wisconsin cheese
    - (6) Distribution of Wisconsin potatoes
    - (7) Feasibility of adopting a state brand to standardise Wisconsin products.
    - (8) Agricultural co-operation and co-operative methods
    - (9) Survey of Wisconsin rural schools
    - (10) Survey of Wisconsin high schools
    - (11) Survey of Wisconsin normal schools
    - (12) Survey of the University of Wisconsin
  - (B) Investigations and surveys designed to attain greater efficiency in state administration:
    - (1) Departmental and institutional accounts, accounting records, cost systems and reports
    - (2) Statistical study of food costs at the state charitable and penal institutions
    - (3) Budget practices of various states and nations
    - (4) Prison contract labor
    - (5) Departmental organization and efficiency of state employes
    - (6) Feasibility of a central board of control for all public educational institutions
    - (7) Efficiency and cost of state printing.

*Publications of the Board*

Reports submitted and publications issued covering investigations and surveys conducted were as follows:

Reports submitted to the legislature:

- (1) Survey of the University of Wisconsin
- (2) Survey of the Normal Schools
- (3) Survey of the High Schools
- (4) Survey of the Rural Schools (1913 legislature)
- (5) Investigation of the Feasibility of a Central Board of Control for all Public Educational Institutions
- (6) Investigation of the Efficiency and Cost of State Printing
- (7) State Receipts and Expenditures 1903-1914
- (8) State Budget

Report submitted to the Civil Service Commission:

- (1) Departmental Organization and Efficiency of State Employees

Publications issued by this board, other than those addressed to the legislature:

- (1) Co-operation among Farmers, Especially in Marketing
- (2) Agricultural Co-operation:
  - (a) Co-operative Live Stock Breeding
  - (b) Co-operative Cow Testing
  - (c) Co-operative Creameries and Cheese Factories
  - (d) Co-operative Live Stock Shipping
  - (e) Co-operative Fruit Grower's Association
  - (f) Co-operative Warehouses
  - (g) Co-operative Elevators
  - (h) Mutual Telephone Companies
- (3) Co-operative Marketing
- (4) Municipal Markets
- (5) The Marketing of Wisconsin Cheese
- (6) The Problem of Rural Credit or Farm Finance
- (7) State Loans to Farmers
  - (a) In other countries
  - (b) In the United States
  - (c) History of, in New York, New Jersey and Wisconsin
- (8) The Budget
  - (a) Budgetary practices and procedure in England, Germany, France, Switzerland, Belgium, Canada and in Congress and the forty-eight states of the United States
  - (b) A plan for Wisconsin

Publications issued by the department of agricultural economics, University of Wisconsin, covering investigations conducted by that department at the request of this board:

- (1) Marketing and Price of Wisconsin Cheese
- (2) Marketing of Wisconsin Potatoes
- (3) Farm Credit in Wisconsin.

#### THE ECONOMY AND EFFICIENCY COMMISSION OF NEW JERSEY

The New Jersey "commission upon the reorganization and consolidation of different departments of the state government whose functions are interrelated" was created by a joint resolution of the legislature adopted in April, 1912. (Laws of New Jersey, 1912, pp. 945-946.) The resolution stated that the interests of economy and efficiency required the consolidation of different departments of the state government, and that inasmuch as the legislature, during the busy work of the session could not properly plan to bring this about, it created a commission of seven "for the purpose of considering the best means to consolidate various boards."

#### *The Personnel of the Commission*

It was provided in the resolution that the commission was to consist of two members of the senate to be appointed by the president of the senate; two members of the house to be appointed by the speaker; and three citizens of the state of New Jersey to be appointed by the governor, such commission to report to the next session of the legislature its recommendations. It consisted of Senators Walter E. Edge, of Atlantic County, and Isaac T. Nichols of Cumberland County, and Assemblymen Albert De Unger, of Camden County, and Frank M. Stevens, of Bergen County, and Messrs. Samuel Ludlow, Jr., and James F. O'Meala, of Jersey City, and William J. Kraft, of Camden. An appropriation of \$5,000 was provided.

#### *Purpose of the New Jersey Commission*

As to the purpose of the commission, its second report pointed out definitely that it had strictly limited itself "to an examination with a view to the reorganization and consolidation of boards, bureaus and offices, eliminating those that are superfluous, and thereby making for efficiency and economy. Retrenchment in detail is strictly a function of the Legislature, and must rest with the Appropriation Committees. This Commission has no power either to interfere with or to dictate to them in their work. We maintain, however, that the suggestions as embodied in our report, made after a careful investigation, and [sic] which provide for the reorganization of many departments of the State having similar functions, will result in such businesslike methods in the conduct of the State's affairs as to [sic] enable future legislative Appropriation Committees to deal more intelligently with the

demands made upon them by the various boards and departments, thereby to effect much larger economies than may be immediately shown by the direct recommendations of this Commission."

*Commission Continued Beyond Original Time Limit*

During 1912 and the first part of 1913 many sessions were held and many witnesses were examined. In February, 1913, the first report was submitted to the legislature. At the close of the session of 1913 an appropriation was made by the legislature to continue the work of this commission. Messrs. De Unger and Stevens had ceased to be members of the house of assembly and were succeeded by Walter L. McDermott and William E. Mount.

From the beginning of its work the commission devoted much time to the examination and study of the powers and duties of the various state departments, boards, commissions and offices. A secretary was employed who gave his entire time to the collection and tabulation of data about each state agency and to the preparation for the members of the commission of comparisons between the New Jersey state government and that of other states. In addition to this the commission kept in constant touch with the national efficiency and economy commission and with officials in a large number of states. It made careful studies of business establishments conducted on modern lines and, so far as the funds of the committee permitted, employed economy and efficiency engineers. The work of the first two years is indicated by the conclusions set forth in the second annual report. A large number of state agencies were examined and recommendations for the reorganization and consolidation of many of these were made.

In the third report made by the commission the legislature was sharply taken to task for its failure to act upon the recommendations of the second report. The commission stated that in order to strengthen its position a firm of expert business accountants and efficiency engineers was employed for the purpose of formulating a concrete scheme of consolidation after conducting an investigation of the possibility for a new department of conservation and development. This report was included in the documents of the commission.

The third report stated further that the commission had not drawn upon the larger part of the supplementary appropriation

that was granted. The report practically confined itself to reiterating the recommendations presented in the previous report.

*Many Recommendations Enacted into Law in 1915*

The legislature apparently gave heed to the repeated advice of the commission during the session of 1915 and many of the plans of the commission were enacted into law. The fourth report, issued in 1916, urged the enforcement of a tenement house act by the state commission method. It recommended also that a bureau for the purchase of all furniture, equipment and other material for the use of the state be provided.<sup>1</sup> Drafts of laws with this object in view were appended.

The final report of the commission was issued in January, 1917. It consisted merely of a résumé of all that had been attempted by the commission. The final meeting of the commission was held late in 1916, at which it was decided that, having carried out the purposes for which the legislature had created it, there was no further work for it under the terms of the resolution establishing it and that it should discontinue its work with the formulation of the annual report. Since that time it has done nothing. It is worthy of note that Walter E. Edge, president of the commission from the beginning, was elected governor of New Jersey in 1916.

*Publications of New Jersey Commission*

The publications issued by the commission were as follows:

First report, issued in 1912.

Message of James F. Fielder, Governor of New Jersey transmitting to the legislature the second report of the commission upon the reorganization and consolidation of the different departments of the state government whose functions are interrelated—1914.

Third report of the economy and efficiency commission, 1915.

Fourth report of the economy and efficiency commission, 1916.

Fifth report of the economy and efficiency commission, 1917.

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<sup>1</sup> A state purchasing act was passed in 1916.

## THE COMMISSION ON ECONOMY AND EFFICIENCY OF MASSACHUSETTS

*Establishment and Duties of the Commission*

An act establishing a commission on economy and efficiency was approved by the governor of Massachusetts on June 6, 1912. (Acts and Resolves, Massachusetts, 1912, p. 800.) It provided for a commission of three, one of whom should be the auditor of state. One was to be designated as chairman, give all of his time to the work, and receive an annual salary of \$5,000. The third was to receive \$3,500. The two appointed were to hold office for two years, and to be appointed on alternate years by the governor with the advice and consent of the council. The duties of the commission were minutely prescribed in the act. The first concerned the preparation of estimates and will be described in the subsequent chapter on the budget.

The second duty was stated as follows: "At request of either branch of the general court or of the ways and means committee of either branch, or of the governor, the commission shall make a special examination of any matter affecting the management or finances of any department, institution, board, undertaking or commission . . . and on request shall give any information in its possession to either branch of the general court or to the ways and means committee of either branch or to the governor." The commission was also granted authority to make investigations of the management or finances of any department or board on its own initiative, and to report the results thereof to the governor or general court. These reports might be in the nature of recommendations of changes in the organization of the administrative agencies of the state—"the reorganization, consolidation or co-ordination of departments and institutions, by different methods of administration, by classification of employes, by fixing maximum and minimum salaries, by standardizing vacations, by organizing a central purchasing agency or department, by the substitution of the budget method of appropriating money." (*Ibid.*, p. 800.)

For the execution of these duties the commission was given wide powers of compelling the attendance of witnesses, the production of papers and other material needed in investigations.

The act required the commission to make a report to the governor and council and the general court in January of each year, showing the work done, with such suggestions and recommenda-

tions as it should see fit. All suggestions of this nature were to be accompanied by drafts of proposed bills.

*Moneys Appropriated for the Work*

Including the salaries of the commissions, the general court made the following appropriations:

1912—	\$18,500
1913—	\$28,500
1914—	\$28,500
1915—	\$39,000
1916—	\$34,000

In 1914 the general court reorganized the commission (Acts and Resolves, 1914, p. 715) removing the auditor and providing for the appointment of all the commissioners by the governor. The term of each member was increased to three years with the appointment of one each year. This meant that only one appointment might be made during the term of a governor. The new commission was to succeed to all the powers and duties of the old one. A substantial increase in the appropriation accompanied this change.

*Commission Abolished and Single Official Substituted*

In an act approved June 1, 1916, the commission was abolished and a single official provided to take over its functions. This official was given the title of "Supervisor of Administration," and was appointed by the governor for a term of three years at an annual salary of \$5,000. He is subject to removal for cause by the governor and council. His power of appointment of deputies was made subject to approval by the governor and council. The committee on finance of the governor's council under the terms of the act is to be an advisory board and may hear and decide appeals from the decisions of the supervisor. It was provided in the act that one of the deputy supervisors should make an investigation of purchasing methods and report with recommendations to the supervisor who was authorized thereupon, with the approval of the governor and council, to order changes in purchasing not inconsistent with law.

During the life of the commission a large number of investigations were made. Some were inaugurated at the suggestion of the governor, a few in compliance with acts of the general court and a larger number on its own initiative. With some exceptions, all of these investigations were summarized in the annual

reports. Three of the more important studies made by the commission were published in separate reports as indicated below in the list of publications.

The first appointees were John M. Cole, chairman, and Francis X. Tyrrell, with John E. White, auditor and member *ex officio*. After the reorganization Russell A. Wood replaced the auditor. Mr. Cole resigned in 1914 and was replaced as chairman by Mr. Tyrrell, while Thomas W. White was added. Charles F. W. Archer replaced Mr. Wood in 1916.

#### *Publications*

The publications of the Massachusetts Commission were:

Annual Reports of the Commission on Economy and Efficiency for 1913, 1914, 1915.

Report on the Reorganization of Boards and Commissions Having Supervision and Control of State Institutions, February 7, 1914.

Report on Functions, Organization and Administration of the Departments in the Executive Branch of the State Government, November, 1914.

Report on Budget Procedure, May 27, 1916.

#### THE SUPERVISOR OF ADMINISTRATION OF MASSACHUSETTS

To the position of supervisor of administration, created as stated in the foregoing section, the governor appointed the late Charles E. Burbank, who assumed the duties of the position on August 7, 1916. Thomas W. White and Ernest H. Maling were appointed deputies and Charles F. W. Archer secretary.

During the remaining months of the year the supervisor and his staff were engaged in the following undertakings:

A preliminary study of purchasing methods in the various departments and institutions;

The supervision of the publication of departmental reports;

A preliminary study of standardisation of salaries in the state administration;

An investigation relative to pensions for the needy blind.

The first report of the supervisor was published in January, 1917, and included a statement of the powers and duties of the department, the chief investigations imposed upon it by law which it planned to make in the immediate future, the results of the first half year's work, and a few recommendations of a minor nature made to the general court.



#### THE COMMITTEE OF INQUIRY OF NEW YORK

Early in January, 1913, Governor William Sulzer finding that "the expenses of administration had several times multiplied during the past generation and that the expenses had amounted to so startling a figure that an investigation for the causes of such a result was imperative," availed himself of the authority vested in him by law to appoint a committee to inquire into the increasing cost of the government and to propose methods of applying sound business principles to the affairs of the state.

This committee, appointed on January 6, 1913, consisted of three members with a fourth who acted as counsel. The personnel was Mr. John N. Carlisle, Chairman, John H. Delaney and H. Gordon Lynn, and John T. Norton, Counsel.

An examination of departmental estimates was made and the findings submitted to the governor in a report dated March 21, 1913. This report analyzed the appropriations for the current year and recommended an adoption of certain estimates and suggested a number of legislative measures. Among these were suggestions for the establishment of several new agencies with control over financial affairs, the consolidation of several administrative boards and the creation of a permanent department of efficiency and economy. The permanent department of efficiency and economy was created by an act passed in the following month.

#### THE NEW YORK STATE DEPARTMENT OF EFFICIENCY AND ECONOMY

##### *Establishment of Office as a Department of the State Government*

The New York state department of efficiency and economy was established by act of the legislature, April 14, 1913. The law creating the department provided for the appointment by the governor, by and with the advice and consent of the senate, of a commissioner for a term of five years at a salary of \$12,000 per annum. The commissioner was authorized to appoint such deputies and employes as he deemed necessary. The commissioner was given very broad powers of investigation and recommendation and was also made by the same act *ex officio* secretary of the state board of estimate which was created at the same time. As secretary of the state board of estimate he was directed to receive and tabulate the requests for appropriations from all departments and offices. The heads of the various departments

were required to submit their requests to him in the form which he should prescribe, and accompany these requests with such explanations as he might require to assist in the appraisal of the requests for appropriations.

The powers and duties of the commissioner are thus defined in the act:

"The commissioner of efficiency and economy shall make a careful and thorough study of each office, institution and department maintained by the state and shall from time to time make recommendations to the governor and to the officer, board or commission in charge of said office, institution or department touching the efficiency and economy of the work, business and service therein. He is hereby empowered, and it shall be his duty to examine the accounts and the methods of business, accounting and administration of the several offices, institutions and departments supported by the state, for the conduct and maintenance of which any appropriation of moneys is made by law, and for the purpose of such examination, he shall have the power, and he is hereby authorized to subpoena witnesses and compel their attendance before him and to subpoena and compel the production before him of books, papers, accounts and documents of every kind, and to administer oaths to all persons subpoenaed or appearing as witnesses before him and to examine, take the testimony of and require answers from all such persons upon all subjects pertinent to any examination being conducted by him. He shall have the power and he is hereby authorized to require the several offices, institutions and departments of the state to furnish to him, upon forms prescribed by him, all such detailed information touching the business, accounts, affairs and administration of such offices, institutions and departments as he may demand, and it is hereby made the duty of all the offices, institutions and departments of the state to furnish such information in such form to the said commissioner of efficiency and economy." (Sec. 3, Chap. 280, Laws of 1913.)

#### *Work of the Department, 1913, 1914 and 1915*

It has been generally conceded that the powers of investigation thus given to the commissioner of the department were the broadest ever placed in the hands of a state officer in New York. During the life of the department, this authority was not questioned. In addition to this power of investigation, the commissioner had the power of compelling other departments to keep their accounts in the manner that he prescribed. His powers and duties respecting the budget are considered in Chapter IV, where an account is given of what he accomplished in that respect. It will be seen there that a large part of the work of the department was concerned with the preparation of appropriation measures for the 1914 and 1915 sessions of the legislature. In addition to its work on the budget, the staff of the department spent much of its time in highway investigations. The head of the department of highway engineering of Columbia University was retained in August, 1913 as an advisory expert on highway affairs, and he together with an expert on the chemistry of roadmaking remained in charge of the highway investi-

gation throughout the life of the department. Some of the improvements resulting from the investigations and recommendations were: the adoption of "open specifications" for asphalt paving which ended the monopoly enjoyed by one company; the reduction of the number of types of roads constructed in the state from fourteen to nine standard types; the rejection of some thirty-nine faulty contracts, at an estimated saving of \$500,000; and prevention of extravagant construction.

The department also made an exhaustive investigation of the state hospitals for the insane; obtained the dismissal of one hospital superintendent for misconduct; directed hearings on the quality of the food supplied inmates; inaugurated new purchasing and accounting methods in co-operation with the hospital authorities; through the services of consulting architectural and hospital experts caused the adoption of improved construction plans for new buildings; inaugurated new specifications for the purchase of coal for all institutions; and effected changes in the plants through the work of its power and heating engineers which made for efficiency in operation. In addition, the charitable institutions and reformatories were brought into co-operation on purchasing, and a uniform accounting system for forty-three institutions was installed.

Much of the work done by the department was co-operative. An audit of the state treasurer's office was made after the death of the treasurer; waste in the reconstruction of the capitol was checked through co-operation with the state architect; a bill was drawn to end waste in state printing and the purchase of office supplies which was introduced at two sessions but failed of passage, and a special examination was made of the cost to the state of a proposed plan to furnish free text books in all the public schools,—this examination being made at the direction of the legislature under a special appropriation. The department was also instrumental in defeating a special bill providing for the payment by the state for the purchase of road machinery by towns, which was declared by the governor, after it was exposed, to be one of the worst "steals" ever attempted.

In the preparation of its report in the fall of 1914, the commissioner invited and obtained the co-operation of the New York Bureau of Municipal Research, which received no compensation from the state, but furnished a large staff to assist in making a report on the organization and functions of the state government which was adopted by the constitutional conven-

tion commission and submitted to the convention as one of the official documents for the guidance of that body.

Owing to the political upheaval caused by the impeachment of the governor shortly after the department was created, and the failure of the civil service commission to hold examinations promptly for accountants, engineers, etc., the department was greatly delayed in organizing its force. Only 27 persons, including office boys, etc., composed the staff of the department at the end of the fiscal year in 1913. By January, 1915, the employes of all kinds, including the commissioner, numbered 71. The organization contained a general administration division, an advisory board, bureaus of finance and budget, curative, charitable and penal institutions, public works departments and a miscellaneous departments bureau. The annual payroll amounted to \$165,000. The officers of the department were John H. Delaney, commissioner, H. G. Lynn, deputy commissioner, Charles H. Jackson, chief examiner, Wood Drake Loudoun, chief accountant, Charles F. Kerrigan, secretary. The advisory board consisted of Arthur H. Blanchard, consulting highway engineer, Prevost Hubbard, chemical engineer, A. T. Brockway, consulting architect, M. E. McCalmont, consulting advisor in hospital management. The staff included certified public accountants, investigators, examiners, highway engineers, power plant engineers, printing experts, statisticians, etc.

Shortly after the return of the Republicans to power in 1915, a bill to abolish the department was enacted as a party measure and took effect March 12, 1915. The records and unpublished reports of the department were delivered to the comptroller and the equipment was turned over to the secretary of state for use in compiling the state census. No other agency was created in its place, nor were its powers transferred to any other officer. The work of the department was recognized by the constitutional convention of 1915, which employed the report on organization and functions of the state government as one of its official documents and invited the former commissioner to appear before its committee on state officers to outline a plan for reorganization of state departments.

#### *Publications*

The publications of the department were:

Comparative Analysis of Appropriations, June, 1913—32 pages

Specifications Recommended by Advisory Board of Efficiency and Economy to Highway Department, December, 1912—28 pages

**THE STATE COMMISSIONS—NEW YORK**

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- Comparative Tabulations of Requests for Appropriations, January, 1914—303 pages  
State Budget Report, March, 1914—262 pages  
Annual Report of Department, January, 1915. Five volumes as follows:  
Vol. I.—Budget Report—995 pp.  
Vol. II.—Organisation and Functions of the Government of the State of New York, 768 pp. with charts  
Vol. III.—Report on Investigation of Cost of Providing Free Text Books—445 pp.  
Vol. IV.—Report on Investigation of State Institutions:  
(1) Accounting methods, (2) Conditions disclosed by examinations, (3) Organisation and administration of hospitals for the insane, (4) Problems of construction, (5) Prisons and correctional institutions, (6) Charitable institutions—993 pp.  
Vol. V.—Construction and Maintenance of Public Highways—365 pp.

THE COMMITTEE ON RETRENCHMENT AND REFORM OF IOWA

By a joint resolution passed February 6, 1913, the general assembly provided for a committee on retrenchment and reform to be composed of the chairmen of the committees on ways and means, judiciary and appropriations of both senate and house and two members of the minority party of each house to be appointed by the presiding officers. (Session Laws, 1913, p. 427. Resolution No. 9.) This committee was authorized to "institute such changes in the administration of public affairs as will promote efficiency, engineers to assist in the investigation." An appropriation of \$10,000 was provided. (*Ibid.*, p. 23.)

The membership of this committee was Joseph H. Allen, chairman, Joseph Mattes, Leslie E. Francis, John L. Wilson, Sherman W. De Wolf, John W. Jacobs, Wm. Larrabee, Jr., Gerrit W. Clay, Charles W. Miller, Benj. H. Black.

The month following the establishment of the committee a firm of efficiency engineers was employed to examine and report on "the existing procedures incident to the transaction of the business of the state . . . and to make recommendations with a view to the betterment thereof." (Manuscript Report of the Efficiency Engineers, p. IV.) "On September 13, 1913, the work of the 'expert accountants and engineers' was terminated under instructions from the committee and their final report is submitted under date of December 21, 1913." (Reorganization of State Government in Iowa, Horack, p. 59.)

On November 12, 1914, the committee on retrenchment and reform issued a report containing its recommendations. A more formal and complete report was promised which has not yet appeared.

The report of the efficiency engineers was submitted in typewritten form and has not been published. It is well summarized in Professor Horack's monograph "Reorganization of State Government in Iowa," published by the State Historical Society of Iowa.

The only publication of the committee is entitled "Recommendations of the Committee on Retrenchment and Reform of the Thirty-Fourth General Assembly."

#### THE EFFICIENCY AND ECONOMY COMMITTEE OF ILLINOIS

Perhaps the most comprehensive survey yet made of state government is that which has been completed by the efficiency and economy committee of Illinois. Governor Dunne in his inaugural address in January, 1913, made the recommendation that a joint committee of the two houses of the legislature be appointed to investigate the condition of the public institutions of the state and in conference with the state board of administration to ascertain if it is not possible to reduce the expenditures without impairing the efficiency of the various state agencies. Later a joint resolution was adopted by the legislature which provided that a "joint committee of eight (8) be appointed, composed of four (4) senators and four (4) representatives who shall have full power and authority to investigate all departments of the state government, including all boards, bureaus, and commissions which have been created by the general assembly, such investigations to be made with a view to securing a more perfect system of accounting, combining and centralizing the duties of the various departments, abolishing such as are useless and securing for the state of Illinois such reorganization that will promote greater efficiency and greater economy in her various branches of government." (Senate joint resolution, number 22, the 48th general assembly.) The committee had full power to employ assistance and was given an appropriation of \$40,000. (Item 68, House Bill H. 95.)

#### *Personnel and Duties of Committee*

The committee appointed consisted of Senators Walter I. Manny, of Mt. Sterling; W. Duff Piercy, of Mt. Vernon; Logan Hay, of Springfield; and Charles F. Hurburgh, of Galesburg (by the senate); and Speaker William McKinley, of Chicago; and Representatives Charles F. Clyne, of Aurora; John M. Rapp, of Fairfield, and Edward J. Smejkal of Chicago (by the speaker). Charles F. Clyne, Secretary. It began its work in August, 1913.

As will be noted the resolution creating the committee imposed upon it two duties: (1) the formulation of a more perfect system of accounting; and (2) the devising of a general plan of administrative reorganization. The committee subsequently found that the former task was not possible because of the limited time and funds at its disposal, so it narrowed its attention to the latter problem, namely, administrative reorganization and combina-

tion. Only a preliminary study of accounting methods was made. The recommendations submitted are confined to the reorganization of "those offices and activities which are under the governor or which may be controlled by the general assembly."

#### *Method of Work*

Believing that it should have as a basis for its work thorough and exact knowledge of the existing state offices, boards and commissions, the committee employed John A. Fairlie, Professor of Political Science in the University of Illinois, as director of its investigational work and empowered him to collect the necessary information. For this investigation the numerous administrative agencies of the state were combined into a number of groups based upon their general functions. Each of these was assigned to a trained investigator who made reports to the committee.

The reports submitted to the committee were:

Revenue and Finance Administration, by John A. Fairlie, Professor of Political Science, University of Illinois.

The Accounts of the State of Illinois, by George E. Frazer, C. P. A., Comptroller of the University of Illinois.

Accounting Administration for Correctional Institutions, by Spurgeon Bell, formerly Secretary of the Chicago Commission on City Expenditures.

Charitable and Correctional Institutions, by James W. Garner, Professor of Political Science, University of Illinois.

Educational Administration by John M. Mathews, University of Illinois.

Labor and Mining Administration, by W. F. Dodd, Associate Professor of Political Science, University of Illinois.

Agricultural Agencies, by James W. Garner, Professor of Political Science, University of Illinois.

Public Health Administration, by John M. Mathews, University of Illinois.

Supervision of Corporations, by Maurice H. Robinson, Professor of Industry and Transportation, University of Illinois.

Public Works, Parks and Buildings, by C. O. Gardner, Municipal Reference Bureau, Cincinnati.

Military Administration, by Quincy Wright, University of Illinois.

Civil Service Laws, by A. C. Hanford, University of Illinois.

For several months meetings were held at short intervals and, later, public hearings were held in Chicago and Springfield for the further consideration of the tentative plans. At these public hearings many state officials, representatives of associations and organizations appeared and discussed the plans of reorganization proposed. As a result, much additional information was secured and some changes were made in the tentative proposals. The committee was careful to point out that the work was at-



tempted with no view to criticise individuals, but to remedy defective organization provided by law.

*Publications*

Two reports were made, a preliminary report issued June 18, 1914, and a general report issued nearly a year later. The latter contained the recommendations of the committee, the reports of the special investigators, a comparative statement of appropriations covering three legislative periods, and several charts to illustrate both the existing government and the proposed changes.

THE ECONOMY AND EFFICIENCY COMMISSION OF PENNSYLVANIA

The economy and efficiency commission of the commonwealth of Pennsylvania was created by a joint resolution of the general assembly. This measure, approved by the governor July 25, 1913, authorized the appointment by the governor of a "commission to investigate and report on the number, character of duties, and compensation of persons in the employ of the state government." (Report of the Economy and Efficiency Commission, p. iii.)

The salary of each member was to be \$3,000 per year. The resolution, moreover, provided an appropriation of \$25,000 which Governor Tener in approving the act, cut to \$10,000. The resolution provided that upon the submission of its report the commission should pass out of existence.

The commission was to consist of men "well versed in business and governmental affairs and in systems of economy and efficiency in administration." The personnel of the commission was Harry S. McDevitt, chairman, William H. Fisher, secretary, and Jacob Soffel.

*Commission Made a General Survey*

The commission did not attempt to propose a comprehensive plan of reorganizing the state administration; its work being more in the nature of a preliminary survey. In order to obtain the necessary information and data, the commission inquired especially into the following subjects:

1. The acts of the assembly creating and relating to the various departments.
2. The name, compensation received, and duties actually performed by each employe.
3. The fund from which the salary of such employe was drawn.
4. Obsolete departments, boards and commissions.
5. Duplication of work and conflict in authority.
6. Methods of centralization and improvement.

In case the department or commission was found to be doing satisfactory work, the commission usually recommended that, when necessary, increased appropriations be provided; in other instances, it proposed the abolition or reorganization of unsatisfactory state agencies.

The sole publication issued by the commission was the final report transmitted to the governor December 24, 1914. This

report was almost wholly devoted to a large number of specific recommendations made. On account of the limited time, the commission did not go beyond an investigation of the departments comprising the executive branch of the government. An appendix was added which was designed to show reference to acts of assembly, giving the years and page numbers, creating and relating to each department; the name, compensation received and position held by each officer and employe; and the act regulating each position and indicating whether it was created by statute, by appropriation or by contingent fund.

THE EFFICIENCY AND ECONOMY COMMISSION OF MINNESOTA

*Commission Composed of Thirty Members*

The efficiency and economy commission of Minnesota was created in October, 1913 and began its work in November of that year. The commission was composed of thirty members, selected by the governor and representing all sections of the state and of political and industrial interests. The commission included in its membership merchants, bankers, lawyers, capitalists, members of the legislatures, professors, editors, representatives of the State Federation of Labor, a hotel proprietor and the owner of a laundry. It had no appropriation from the state; its members gave their services without charge, even defraying their own traveling expenses; furthermore, they raised by private subscriptions the funds required for the general expenses of the commission.

*Policy Adopted to Confine Study to Methods of Administration*

At the outset the commission formulated its policy in a resolution to the effect that it would make no recommendations relative to the functions of the state, but would restrict its activities to an examination of the present methods of performing the work already undertaken by the state government. In the language of the Preliminary Report (Preliminary Report of the Efficiency and Economy Commission, page 7): "Not *what* the state should do, but the *way* it should do it. The recommendations of the commission add no powers or duties to the governor; they create no new duties, no new rights on the part of the citizen, nor do they in any way lessen or change powers, duties and rights of the state government or of the citizens. The object of the commission is to recommend a plan by which the work of the state government, whatever it is now or may be in the future, may be well done and economically. . . . The commission has not inquired into the efficiency or honesty of individual officers or employees; it is not looking for 'graft'; it has tried to find what is wrong in the system of government, not in the work of individuals."

The investigations were conducted by subcommittees, each one of which was composed of five members of the commission. For the purposes of the survey the whole field of state government was broken into six divisions: executive and co-ordination; general administration and finance; public domain, lands and

works; education and public welfare; commerce, industry and transportation; and safety, protection and agriculture. The commission employed a staff composed of a consulting statistician,—Dr. E. Dana Durand, former director of the United States census,—a secretary and a clerk.

#### *Publications*

The commission published two documents—a “Preliminary Report” May 25, 1914, and a “Final Report” November, 1914. The first of these documents contained a statement of the purposes of the commission, the main features of the commission’s plans and an outline of the proposed civil government for the state. The second report embraced the positive statutes drawn up by the commission for carrying into effect the general conclusions of the commission with regard to civil administration in the budget. Each of the reports contained a chart setting forth the existing organization of the state government and the proposed plan of the commission.

#### THE COMMISSION ON THE REORGANIZATION OF CIVIL ADMINISTRATION OF MINNESOTA

By resolution approved April 21, 1915, the legislature of Minnesota provided for the appointment of a commission of eleven members. Three were appointed by the governor, four by the lieutenant-governor, and four by the speaker of the house. The duties of this commission were the investigation of the advisability of making changes in the civil administration of the state, “and for the further purpose of promoting more efficiency and economy in the various activities of the state.” (Appendix to Message of Governor Burnquist, 1917.)

#### *Commission Practically a Legislative Committee*

Governor Hammond followed the policy of the presiding officers of the houses, appointing only members of the legislature, so the commission as finally constituted was practically a committee of the legislature. At the first meeting of the commission A. J. Rockne was chosen chairman. The other members were Lewis C. Spooner, Gunnar Bjornson, F. A. Duxbury, James A. Carley, J. A. Jackson, Thomas H. Girling, C. H. Warner, Thomas J. McGrath, Fred Bessette, E. P. Peterson.

The commission in its report stated that many public meetings were held and a considerable amount of assistance secured from various state departments. It also acknowledged that it was

largely guided by the previous efficiency and economy commission reports.

In addition to a number of recommendations summarized in subsequent chapters of this bulletin the commission recommended the submission of a constitutional amendment providing for the limitation of the state senate to fifty members and the house to one hundred. It also requested the state legislature to call a constitutional convention.

*A Six Page Report.*

Its report was published as a supplement of the inaugural message of Governor J. A. A. Burnquist to the legislature in January, 1917. The report contained six pages of printed material, chiefly in the form of specific recommendations.

COMMISSION ON THE CONSOLIDATION OF STATE COMMISSIONS OF  
CONNECTICUT

The general assembly of Connecticut approved an act on February 9, 1915, providing for the appointment by the governor of a commission of nine members, a majority of whom should be members of the general assembly or of existing state or county commissions, to make a report before April 1 of the same year upon the following subjects:

"The reorganization and consolidation of the various state and county boards with a view to greater economy and efficiency;

"The revision of the public health laws with the purpose of fixing more definitely the responsibility of officials, and of eliminating waste and duplications of authority and of preventive laws, with the purpose of ascertaining whether the constructive work of medicine and science may not be more efficient than is possible under the present law (House Bill No. 138. General Assembly, 1915. Quoted in Report, p. 2).

*Commission Reported to General Assembly Before Adjournment*

The governor appointed the following as members of the commission: Dr. William H. Carnalt, Howell Cheney, Ernest P. Chesbro, George E. Hill, Dr. Edward K. Root, Lewis Sperry, Dudley L. Vaill, James E. Wheeler, Julius E. Whiton.

The commission met and organized by choosing the first named as chairman and Robert A. Windlow, Jr., as clerk.

In the investigation which followed, seventeen days were devoted to hearings on the work of thirty-two boards and commissions. In addition public conferences were held with representatives of the shell-fish, agricultural, labor and manufacturing interests. After this investigation the commission in accordance with the provisions of the act submitted its report to the same session of the assembly.

The printed report of the commission comprised more than one hundred pages with supplementary charts and tables setting forth the constitution, powers, duties and expenditures of some of the state boards and commissions. In addition to the recommendations concerning administrative reorganization mentioned in a later chapter, ten proposed drafts of acts to carry out the recommendations made were included in the body of the report.

The only publication of the commission is the report issued as a public document of the state of Connecticut with the following title: "Report of a Commission to Investigate the Advisability of Consolidating Certain State Boards and Commissions and to Investigate the Public Health Laws."



LEGISLATIVE INVESTIGATING COMMITTEE OF ALABAMA

On February 13, 1915, the legislature of Alabama provided by joint resolution for the creation of a legislative investigating committee. (General Acts, 1915, p. 207.) This committee was to consist of five members of the house and three members of the senate to be appointed by the presiding officers thereof in addition to the speaker of the house who was to be a member *ex officio*. It was to meet during the recess of the legislature and to report to the same session.

Power was given by the resolution "to investigate each and every department of the state, and properties thereof, the expenditure therein, for what purpose and how paid." More specific directions were also given to determine if possible whether evidences of waste of public funds could be found in the records of the administrative departments. The committee was given special authority to investigate the administration of the free text-book law. Authority was granted "to summon and examine witnesses, administer oaths, require the production of all books and papers as may be necessary in carrying out the purposes and intents of the resolution."

Compensation of four dollars per day was allowed with provision for a clerk for the committee whose salary should be the same as that of the members. After the investigation was completed and the report filed the legislature passed an act appropriating three thousand dollars to pay the expenses of the committee. (General Acts, 1915, p. 325.)

The membership of the committee selected was as follows: Henry Merritt, chairman, J. W. Green, John R. McCain, George H. Smith, J. T. Denson, W. S. Welch, John B. Ward and J. M. Bonner.

*Recommendations for a Budget System*

The report of the committee was filed and ordered printed July 13, 1915.

The matters investigated and reported on embraced a wide variety of subjects, the most important of which were:

- Recommendations for a state budget and accounting system
- The care of convicts
- The departments of education and agriculture
- The railroad commission
- A state purchasing department.

In addition to a somewhat limited treatment of the foregoing, one fifth of the report was devoted to itemized accounts of state officials covering traveling expenses incurred in trips made during their incumbency in office. The most attention was given to the expense accounts of Governor Emmet O'Neil who according to the committee during his four-year term spent in trips at the expense of the state the sum of \$2,315.28.

The total cost of the investigation according to the report was not over \$5,500.

The only publication of the committee is the report already mentioned.

THE SURVEY COMMITTEE OF STATE AFFAIRS OF COLORADO

The survey committee was created by an act passed by the legislature in 1915. (Session Laws, 1915, Chap. 161.) The powers given to the committee were of a very general nature and permitted an investigation of practically the entire field of state administration. A sum of \$7,500 was appropriated for expenses. The attorney-general questioned the constitutionality of the act creating the committee and litigation dragged through the greater part of a year and a half. Finally on June 5, 1916, the supreme court declared the law constitutional and the committee was permitted to proceed with its work. But by that time all but six months of the time originally intended for its work had expired while the amount available had been reduced to \$6,500 by the expenses of litigation.

The committee consisted of two members appointed by the senate, two by the house, and three citizens appointed by the governor. Representative Philip B. Stewart was elected chairman. The other members were Lieutenant-Governor Moses E. Lewis, Senator David Eliot, Representative Siewers Finch, Irving Howbert, Lawrence C. Phipps, and Verner Z. Reed. The Civic and Legislative Bureau of the Denver Civic and Commercial Association gave the services of its secretary, Mr. R. E. Wright, to the committee. Mr. Wright acted as secretary of the committee, organizing the staff and supervising the investigations.

*Scope of Investigations*

The main features of the survey as stated by the committee included "recommendations for the budget system of appropriating and expending money, consolidation of departments performing similar functions, substitution of serial bond method for sinking fund plan, complete revision of the highway statutes and the provision of a strong central highway organization, revisions in the taxation and revenue laws, the care of insane and mental defectives, state purchasing and printing, health administration, common school administration and accounting methods."

A considerable amount of gratuitous assistance was given by departments of the United States government and by volunteer organizations.

The following constituted staff of specialists selected for the larger part of the investigations: J. T. Bryne, chief, A. H. Stockder and J. L. Tuttle.

In addition to the work of the committee, its secretary and the staff, the following special studies were planned and delegated to the specialists named:

- A Study of the Mental Defectives in State Institutions for Minors, by Dr. Walter L. Treadway of the United States Public Health Service.
- The Administration of the State Common School System, by A. C. Monahan and Katherine M. Cook of the United States Bureau of Education.
- Care and Treatment of the Insane by the State, by Dr. Samuel W. Hamilton of the National Committee for Mental Hygiene.
- A State Home and Training School for Mental Defectives, by Alexander Johnson of the Committee on Provision for the Feeble Minded.
- The Colorado Tax Commission and the Revenue System of Colorado, by Professor Robert M. Haig of Columbia University.
- A Revision of the Highway Laws of the State, in charge of A. N. Johnson, consulting highway engineer.

All of these reports were completed and submitted to the legislature in February, 1917. The following publications have been issued by the committee with a number of others promised for the near future:

- "Summary of Findings and Recommendations Relating to the Executive Branch of the State Government of Colorado as Submitted to the Survey Committee of State Affairs by its Staff." Issued in December, 1916.
- "Report on a Survey of the Office of Governor of the State of Colorado." Issued in February, 1917.
- "The Work of the Colorado Tax Commission." By Professor Robert M. Haig of Columbia University. With a letter of comment by Professor E. R. A. Seligman.
- "Report on the Revenue System of the State of Colorado." By R. M. Haig.
- "Report on a Survey of the Administration of Public Service Functions Relating to Regulation and Supervision of Labor."
- "The State Board of Land Commissioners." By John B. Geijsbeek.
- "Report on a Survey of the Office of Auditor of State and of the Office of Public Examiner."
- "Report on a Survey of the Office of Secretary of State and on Public Control of Corporations."
- "Report on a Study of State Finances and Budget Procedure."
- "Report on a Survey of the Office of State Treasurer."
- "Report of an Inquiry into the Administration and Support of the Colorado School System." (Bulletin of the U. S. Bureau of Education.)
- "Report on the Care of Dependents, Delinquents and Defectives." By Samuel W. Hamilton, Walter L. Treadway, Alexander Johnson.
- "Report on a Survey of the Department of Game and Fish."
- "Report on a Survey of the State Auditing Board."
- "Report on a Survey of the Office of the State Inspector of Oils."

THE EFFICIENCY AND ECONOMY COMMITTEE OF KANSAS

A joint resolution was adopted by the legislature of Kansas on March 20, 1915, providing for a committee of investigation composed of three members, one to be appointed by the governor and the other two members selected by the senate and house of representatives respectively. The powers given to this committee by the creative resolution were most sweeping while the scope of investigation was practically unlimited: The survey was to include "the business management of every institution and department in Kansas, including the office of every state officer and their contingent funds, all penal, charitable, and educational institutions, all the various departments of the state, and also the number and duties of all employes in the House of Representatives, and in the Senate, with authority to recommend the discharge of every man on the payroll of the state who is not a legitimate employe, and who does not render necessary and efficient service to the state." (Laws of Kansas, 1915, p. 389.)

*Broad Powers of Committee, but Limited Funds*

This grant of power is reinforced by further directions to offer such criticisms of the conduct of state business "as are deserved," and to recommend "improvements of any kind that will facilitate the business of the state or result in more economical administration or management of public affairs."

Full power is granted to hear testimony, either during the session of the legislature or after its adjournment *sine die*, to compel the attendance of witnesses and enforce the production of books, papers, documents and records, and to punish for contempt for failure to obey its mandates and orders, and it is provided that the committee "shall have such other authority as is usually conferred upon such committees."

The committee was to serve without pay, receiving only traveling expenses. For the expenses of carrying out the ambitious program set up in the resolution, a limit of five hundred dollars was fixed.

The report of the committee was to be made to the 1917 legislature.

*Committee Unable to Agree*

Senator W. P. Lambertson was chosen as a member of this committee by the governor, Senator Joseph by the senate, and

Representative E. L. Burton by the house. At the first meeting of the committee, the work was apportioned among the members. Senator Lambertson was to investigate and report on penal and charitable institutions; Senator Joseph, on the educational side of state schools and certain state offices,—particularly the bank commissioner, state treasurer and the auditor; and Representative Burton was assigned to the finances of state schools and the remainder of the state administrative offices. It seems that each member of the committee made his investigations independently and that late in 1916, a disagreement made it impossible to publish the three reports as one. The report of the committee intended as a general summary was submitted by Lambertson and Burton, the third member, Senator Joseph, claiming responsibility for only four of the twenty-one items included.

The two other members refused to allow Senator Joseph to include his report as an appendix of the general report and he published it separately.

The general report comprises a summary of recommendations and contains seven printed pages. Two subsequent reports of about the same size include the results of the investigations of the educational, penal, charitable and other institutions. The separate report of Senator Joseph comprises more than seventy-five pages including three charts and ten proposed bills and resolutions.

#### *Publications*

The titles of the published reports of the committee are as follows:

Partial Report of the Efficiency and Economy Committee  
Report on the Penal, Charitable and Other Institutions of Kansas  
Report on the State Educational Institutions  
Economy and Efficiency Report of Senator J. D. Joseph

COMMISSION ON ECONOMY AND EFFICIENCY OF VIRGINIA

During the 1916 session of the legislature of Virginia an act was passed providing for the appointment of a commission on efficiency and economy "to make a survey of the state and local governments of the commonwealth of Virginia and to submit a report to the next general assembly." (Acts of Assembly, 1916, Chap. 211.) This act was approved March 16, 1916.

The act provided for the appointment of a commission consisting of five members. One was to be chosen by the president of the senate from the membership of the senate, two by the speaker of the house of delegates from the membership of the house and two by the governor from among the voters of the state.

The commission was charged with the duty of making "a careful and detailed study of the organization and methods of the state and local governments" of Virginia and with "reporting to the next general assembly . . . in what way the state and local government can be more efficiently and economically organized and administered." (*Ibid.*, Sec. 1.)

The commissioners were to serve without salary and name their own chairman and secretary from among their number. One thousand dollars was appropriated for the expenses of the investigation.

Senator P. H. Drewry was chosen by the senate, Delegates George L. Browning and J. Calvin Moss by the house and Richard E. Byrd and LeRoy Hodges by the governor. Mr. Hodges was chosen secretary of the commission.

In addition to this commission there was organized an advisory committee to assist the commission in its work. This advisory committee consisted of ten of the leading professional and business men of the state and was headed by John S. Bryan, a Richmond publisher. The advisory committee has signified its intention of raising funds in addition to the appropriation of the legislature to enable the commission to make a more extended survey of the entire state government.

The commission began an extended study which will place on record the name, residence, hours of work, rate of compensation, and method of appointment of every official and employe on the payroll of the state. When this survey has been completed the commission will be in a position to determine upon a program of reorganization of the state administration to submit to the assembly of 1918. No report is planned until the meeting of the assembly in January, 1918.

THE COMMISSION OF SEVEN BUSINESS MEN OF OREGON

During the 1915 and 1917 sessions of the legislature of Oregon "joint committees" were appointed for the purpose of eliminating and consolidating offices, boards and commissions, but neither of these committees actually accomplished anything. The 1917 session, however, provided for a "commission of seven business men" to be appointed by the governor for the purpose of studying the state administration with a view to consolidation and elimination of offices, boards and commissions. It was instructed to report to the legislature in 1919.



EFFICIENCY COMMISSION OF WEST VIRGINIA

One of the pledges made by John J. Cornwell as a candidate for governor of West Virginia in 1916 was the appointment of a bi-partisan efficiency commission to investigate and report upon methods through which more efficiency and economy could be introduced into state affairs. Another of his pledges was the submission of a constitutional amendment providing a budget system similar to the one adopted in Maryland (See MUNICIPAL RESEARCH, No. 80). After his election, Governor Cornwell caused the introduction into each house of the legislature a resolution providing for the appointment by the governor of a bi-partisan efficiency commission of five members to serve without pay, "to examine into the management and expenditures of any branch of the executive department of the state government, and to make a report to the governor, together with such recommendations as it may see proper, looking to the conduct of any department or state institution with greater efficiency or economy." (Journal of the House of Delegates, January 18, 1917.) This resolution passed the house of delegates but was killed in the senate.

*Legislature Balked at Programme Offered by Governor*

In like manner Governor Cornwell sought to redeem another pre-election pledge by establishing a budget system. He caused to be introduced into the legislature a constitutional amendment embodied in a joint resolution providing for its submission to the electorate in 1918. This resolution failed to secure the necessary two-thirds vote. (*Ibid.*, January 16, 1917.) It is of interest to note that the constitutional amendment proposed by Governor Cornwell was essentially the same as that adopted in Maryland in 1916; in fact the governor in a letter submitted with the proposal expressly commended the one framed and recommended in Maryland by the so-called Goodnow Commission in the following terms:

"It seems to me that there is no question about the advisability of a constitutional prohibition against the legislature's making appropriations that will cause a deficit in the treasury. The state should 'pay as it goes.' The draft enclosed is very similar to the amendment adopted in Maryland upon the recommendation of the Goodnow Efficiency Commission, and [sic] which is classed by the Bureau of Municipal Research as more nearly

perfect than any other attempt to provide a budget system undertaken elsewhere. The adoption of this amendment, I earnestly believe, is the most important forward step the state can take." (*Ibid.*, January 16, p. 24.)

In his inaugural address on March 5, 1917, Governor Cornwell commented upon the failure of the legislature to submit the budget amendment and made the promise that he would not give up the attempt to bring about a vote upon the same: "During the next two years, I hope to create sufficient interest among the people to cause them to pledge the members of the legislature, irrespective of political party, to submit this question at the next regular session of the legislature, if not sooner. The people can then determine whether they want their tax money expended in a scientific and businesslike way or whether they want the old log-rolling and back-scratching method of making appropriations to continue." (pp. 9-10).

#### *Commission Appointed Without Legislative Sanction*

In the same inaugural address the matter of the proposed resolution providing for an efficiency commission was given emphatic attention. After scoring the members of the senate who voted against the resolution the governor announced his intention to appoint such a commission despite the disapproval of the senate.

After his inauguration the governor named as members of what he designated an "efficiency commission," Dr. E. B. Stephenson, Professor John D. Coulter of the West Virginia Agricultural College, and Major Hine, retired army officer and efficiency specialist. This commission began its work in April, 1917.

## CHAPTER II

### SUGGESTIONS OF COMMISSIONS REGARDING SELECTION OF PUBLIC OFFICERS

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This chapter is devoted to an examination of the recommendations of the commissions, which concern the selection of the official personnel of the state administration. The selection of offices to be filled by popular election, the mode of appointing all officials not elected, the centralization or decentralization of authority by granting to or withholding from the governor the power of appointment and removal, and the conditions attending the selections and tenure of minor employes of the administration, are considerations which are vitally important in any attempt to reorganize state administration. In setting forth the recommendations which concern these things we shall attempt to answer two questions:

1. Can any considerable tendency be discerned to centralize state administration under the governor by granting him wide powers of appointment and removal?
2. Has the movement for the application of civil service principles to state administration received any considerable recognition?

In obtaining a basis for an answer to the first of these questions it is necessary to inquire whether there is a tendency (1) to apply the principle of the short ballot to the higher administrative offices; (2) to widen the appointive power of the governor without requiring the consent of the senate or other body; (3) to increase the governor's removal power; (4) to vest the appointment and removal of minor officers in higher authorities responsible for large fields of state administration, thus establishing the administrative hierarchy usually deemed essential for the effective distribution of responsibility.

In answering the second will be set forth the recommendations and opinions expressed concerning the application of the merit system to the minor officials of administration.

THE STATE GOVERNOR AS HEAD OF THE ADMINISTRATION

*The Short Ballot*

While it may be said that a tendency toward the short ballot principle can be discerned in the recommendations under consideration, proposals for the actual limitation of the number of elective officers are not marked. This is probably due to the fact that in most of the investigations there was no attempt to suggest constitutional changes, while in other investigations such as those in Wisconsin, New York and Massachusetts the nature of the work imposed upon the commissioners precluded any attempts at sweeping changes in the organization of the government.

In no case was a recommendation made to increase the number of elective officers, while in four states, Iowa, Illinois, Pennsylvania, and Colorado, a shorter ballot was suggested.

The report of the Iowa committee on retrenchment and reform recommends the removal of the railway commission and the attorney-general from the ballot and the appointment of the same by the governor. The report states further that ultimately the constitution should be so amended as to remove in the same manner the secretary of state, the auditor and the treasurer, thus leaving as elective officers only the governor and the lieutenant-governor.

Under the existing government the Illinois committee found that the following were elected by popular vote:

Governor  
Lieutenant-governor  
Secretary of state  
State treasurer  
Auditor of public accounts  
Attorney-general  
Superintendent of public instruction  
Trustees of the University of Illinois  
State board of equalization.

The first seven in this list are protected by the constitution and the policy of the committee did not permit any suggested change as to their choice. However, the committee recommends that the trustees of the University be appointed by the governor and that the state board of equalization, composed of twenty-six members elected by congressional districts, be abolished.

The Pennsylvania commission calls attention to a constitutional provision which would permit of legislation to remove the attorney-general from the ballot and to vest his selection in the governor. It recommends that this change be made.

*The Governor's Power of Appointment and Removal*

In most states the governor is nominal head of the administration but is actually deprived, by restrictions upon his power of appointment and removal, of any real leadership except that which he exercises in a purely extra-legal manner by means of the political organization.

His power of appointment is restricted in three ways:

1. By the popular election of officers of administration who should be subject to the direction of the governor.
2. By restrictions upon the power of appointment such as the commonly required consent of the state senate.
3. By the disjointed, unrelated mass of officers, boards and commissions to be appointed by the governor, the number being so large as to render it impossible for the governor to exercise any really effective discrimination in making selections.

He has in fact been limited both by a lack of appointing power in one direction and too great an amount in another.

The governor's power of removal is still more ineffective. "The methods provided in the states for terminating the official relation are as various and show as little evidence of systematic planning as in the case of the methods provided for creating the relation. Among the more important ways of terminating the relation may be mentioned: expiration of term; death; resignation; forfeiture; loss of qualifications; legislative removal through direct action, through impeachment, through the abolition of the office, or, practically, through failure to make the necessary appropriation for the salary; popular removal through the recall; judicial removal; and removal through administrative action.

. . . In the state administration therefore, even where the power of removal is granted, its exercise is ordinarily so restricted that it is of little use except in flagrant cases."<sup>1</sup>

In most of the reports the desire to avoid constitutional change has not permitted the making of a straightforward recommenda-

<sup>1</sup> Mathews, *Principles of American State Administration*, pp. 185-187. See also MUNICIPAL RESEARCH, No. 61, Ch. 9.

tion that the governor be head of the administration. There is a well defined tendency, however, in the more comprehensive studies under consideration to grant a wider and more unrestricted power of appointment to the governor.

While no fixed policy as to appointment and removal can be found in the report of the New Jersey commission, it is worthy of note that in all but one of the boards provided by the new plan of administration, the members are to be appointed by the governor with the advice and consent of the senate. The only board which is appointed by the governor alone is that of taxation. No provision for the removal of board members is suggested. In all cases where an expert head is recommended for a department, provision is made that he be appointed by the governor. In two cases the advice and consent of the senate is made necessary. In all cases recommendation is made that the governor be empowered to remove the expert head upon hearing of charges brought by the governing board of the department. It would seem, therefore, that the New Jersey commission had in mind a very definite concentration of appointing power in the governor. But it is worthy of note that while the governor is to have the power of removal in the case of department heads, no provision is made for the removal of boards. In his inaugural address to the legislature Governor Edge, who before his election was the head of the New Jersey commission, comments in the following terms: On the failure of the constitution and laws of the state to allow the governor to remove administrative officers. "But I regret that while the governor has the power to appoint most of his administrative officers, he has practically no effective power to remove . . . in the interests of popularly accepted concentration of responsibility, I shall be glad if I live to see the day when the governor under an altered constitution shall have the power to remove as well as to appoint." (Inaugural Address of Walter E. Edge, January 16, 1917, p. 31.)

There is no indication in the report of the Massachusetts commission of a definite policy of making the governor actual head of the administration although in its report on the organization and functions of the state government, it is shown that the common lack of power of the governor as head of the administration is especially marked in Massachusetts. In the report on charitable institutions the commissioner who under the proposed plan would be executive head of the department of charities and correction would be, according to the plan proposed, ap-

pointed by the administrative board of the department, with the consent of the governor.

The report of the efficiency engineers employed by the Iowa committee on retrenchment and reform clearly recommend the need of a large power of appointment to be vested in the governor. All of the department heads proposed are subject to appointment with the consent of the senate. The subsequent report of the committee on retrenchment and reform provides for only three elective administrative officers other than the governor: the secretary of state, the auditor of state and the treasurer. The heads of the three great divisions of administration recommended by the report were to be appointed by the governor, who in addition was to retain his present power of appointing subordinate division heads. All appointees thus made should be subject to removal by the governor for cause. There is little in the report to suggest how the governor might effectively control the administration thus divided.

The Illinois committee was compelled by its policy of recommending only statutory changes to leave five officers in addition to the governor and lieutenant-governor upon the ballot. So far as possible, however, it recommended that elective officers should be made appointive. The functions of the state would, according to its plan, be performed by a limited number of executive departments. The heads of these departments should be appointed by the governor with the advice and consent of the senate.<sup>1</sup> There are no general recommendations as to the appointment of the officers under the department heads. Neither is definite provision for removal recommended.

The only provision concerning the governor's power of appointment made by the Pennsylvania commission is the recommendation that the attorney-general should be appointed by the governor instead of being elected.

The final report of the Minnesota efficiency and economy commission clearly indicates that no constitutional change is proposed. Therefore no change in the method of choosing constitutional officers is suggested. These officers are: governor, lieutenant-governor, secretary of state, auditor and the board of railroads and warehouses. A second list of officers to be appointed by the governor with the advice and consent of the senate is set forth in the report. This list includes the directors

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<sup>1</sup> Enacted into law, See The Civil Administrative Code of Illinois (1917).

of the proposed departments and the advisory boards of each. Removals of board members for neglect of duty or malfeasance may be made by the governor, and directors of public welfare, labor and commerce, and of agriculture are to be removed by the governor at his discretion.

In February, 1917, the Colorado survey committee published a report on a survey of the office of governor of the state of Colorado, which is in many respects the most comprehensive and interesting study of the duties of a state governor that has yet been made. It includes an account of the organization and general duties of the governor's office including his legislative and executive powers, sets forth tables indicating the officials appointed by the governor and makes a number of recommendations for both statutory and constitutional changes concerning the powers and duties of the governor. Carefully detailed information is supplied concerning the governor's power of appointment and removal. A complete table has been compiled setting forth the officials appointed by the governor and another table showing those appointed by the governor with the consent of the senate. In the first list, more than two hundred and seventy-five officers are included while in the second appears ninety-four commissioners, board members, directors and trustees.

Of the existing system of appointment by the governor, the report states: "The power of appointing administrative officers and employes of the State is shared by the Governor and Senate where such power should be in the Governor alone, who, as chief executive, is responsible for results. Further, the Governor appoints subordinate employes in some departments, whereas such employes should be under civil service regulations or appointed by the head of the department who is best qualified to select his subordinates, inasmuch as he is directly responsible for the results of the operation of his department, and may, therefore, be held to a stricter accountability and responsibility.

"Moreover, the present division of responsibility for appointments as between the Governor, Senate and department heads, as referred to above, is destructive of efficient administrative control." (Report No. 1, p. 29.)

It is recommended that: "All administrative offices of the executive branch of the government now appointed by the Governor by and with the advice and consent of the Senate, should be appointed by the Governor alone, or appointed by him by and with the advice and consent of the Senate, should be



either under civil service rules and regulations or appointed by the respective administrative officers." (*Ibid.*, p. 30.)

The governor's power of removal under the Colorado constitution extends to all offices established by the constitution or filled by his appointment either with or without the consent of the senate, but incompetency, neglect of duty or malfeasance in office must be shown. In addition, separate provisions are made for certain other offices. No direct recommendation is made in the report of the commission for altering this power of removal. It will be seen that this gives the governor little more control over removal than in most other states.

A general survey of the recommendations of these commissions indicates the fact that there is a well nigh universal agreement that too many officers are now elected. The tendency is indicated to subject such officials to appointment by the governor. In nearly all cases the provision for confirmation by the senate seems to be retained. The only exception to this is the Colorado plan. Provision for removal is almost entirely omitted from the recommendations of the commissions.

## CIVIL SERVICE

Efficiency and economy in government have in common thought become inseparably connected with a civil service based upon the merit system. A consideration of the recommendations on efficiency and economy dealing with civil service because of the widespread movement in recent years for the application of the merit system to state government is especially valuable. In fact it seems that the tendency towards centralizing large power of investigation and appointment in the hands of the governor renders imperative the adoption of such a corrective for the misuse of such authority through spoils practices. In the investigations under consideration the merit system is mentioned in five instances.

The Pennsylvania report gives no detailed attention to the subject but merely recommends that "such a system be established by law to control state positions to the best interests of the entire commonwealth" (p. 3). It is suggested that the examinations for positions be conducted by the state board of examiners.

The Colorado survey committee points out a very unsatisfactory feature of the existing civil service system of the state. Through a peculiar provision of the civil service law of 1915 the classified service applies to the person occupying the office rather than the office itself. Thus where such an official is removed the new appointee is not subject to the state civil service provisions. As has been noted above the committee recommends that all officials who are now appointed by the governor be placed under civil service but made subject to appointment by department heads. This recommendation involves more than 275 important state offices. The committee, however, has as yet been unable to undertake a study in detail of the civil service system of the state.

The Kansas efficiency and economy committee is inclined to doubt the success of the existing civil service law of the state, although it is in entire accord with its purpose. "Modern and ideal civil service commissions," says the report, "are modern oligarchies. When our governor, commissioners and boards observe in practice the spirit of civil service, it will trickle through to the heads of our departments." (Report, p. 8.)

The recommendations made by the Illinois and Minnesota commissions are of a more comprehensive nature and deserve special treatment.

*Illinois Civil Service*

The final report of the Illinois efficiency and economy committee contains a valuable report (prepared by Mr. A. C. Hanford) on state civil service laws which not only sets forth an historical account of state civil service in Illinois with comments and suggestions as to their amendment but contains in condensed form the provisions of the civil service laws of the United States and of all the states having civil service.

State civil service in Illinois dates back to 1905 when the first civil service legislation was passed. The system thus provided applied only to certain employes of the charitable institutions of the state and restricted the competitive examinations to residents of Illinois. This law was amended in 1907 in certain details but the scope of the system remained the same. In 1909 the establishment of a state board of administration brought a number of new positions within the operation of the service. After a long agitation, amendatory legislation was passed in 1911 which extended with certain exceptions the provisions of the previous act to the general service of the state. As a result of this extension two thousand more employes were included making a total of 80 per cent of state employes subject to the state civil service.

In order properly to appreciate the proposed changes of the efficiency and economy committee it may be well to set forth the features of the existing law.

The civil service commission is appointed by the governor with the consent of the senate. The members, three in number, must not all be of the same political party. Their duties shall include the classification and grading of all offices and places of employment in the state service, with certain specified exceptions, the conduct of examinations and the certification of the name highest on the list to the appointing officer. Only the highest individual on the list is certified to an appointing officer.

The exceptions mentioned above constitute thirteen classes the most important of which are as follows:

All elective officers and all officers appointed by the governor,  
Officers and employes appointed by the courts of the state,  
The teaching staff of the university and the normal schools  
of the state,

The military officers of the state,

Certain specified confidential clerks and stenographers,  
superintendents and wardens of the state charitable  
and correctional institutions.

The commission is empowered to investigate the classified service in regard to efficiency, to make recommendations for improving the service to the officer in charge and in case such officer does not carry out such recommendation to report the same to the governor. The commission is also authorized to standardize the employment in all grades of the civil service. The legislature provided for this work the sum of \$5,000 to be used in the years 1913-1915.

The commission is given authority to make rules in pursuance of the provisions of the law and may investigate the enforcement of the same. It is vested with quasi-judicial power in enforcing its rules and in making investigations, frauds in examinations are made misdemeanors, while any other violation of the civil service act is made a misdemeanor. The auditor of public accounts is forbidden to issue warrants for the payment of anyone in the classified service except upon a payroll certified by the commission.

To the existing civil service law, the efficiency and economy committee proposed the following improvements:

1. It is declared that the exceptions to the application of the law are not satisfactory. It is not stated what the committee deems necessary to change in the list but it is urged in a general way that there are too many exceptions and that limited authority should be granted to make further exceptions in case of necessity. In the bills which the committee promises to submit for carrying out their recommended administrative reorganization of the state there will be, according to the committee, provisions for the exemption of positions by action of the governor.

2. It is considered by the committee that the requirement of a formal investigation by the civil service commission in every case of removal is too rigid. Instead it is suggested that such investigations be subject to the discretion of the commission.

3. The recommendation as to the efficiency work of the commission is so important as to deserve quotation in full:—"The authority of the state civil service commission over the classification of positions and salaries and the keeping of efficiency records marks the beginning of central supervision over the efficiency of the state administrative services. A continuous supervision over the efficiency of the state service is needed; and to be effective it should be exercised by a permanent state authority, with larger powers than are now conferred to control salaries and other expenditures. It may be questioned, however, whether the functions of such a permanent efficiency and economy bureau can be most effectively exercised by the civil service commission. The work is more properly a part of the general system of financial control which it is proposed to vest in the state comptroller, who should co-operate with the civil service commission, as this commission is now required to co-operate with the board of administration in the classification of positions and salaries of state employes under that board." (Report of the Efficiency and Economy Committee, p. 72.)

4. It is further recommended that towns and cities be given the privilege of using the state civil service machinery in the choice of their employes instead of compelling them to maintain a commission at their own expense. Existing local civil service commissions, in the opinion of the committee, should be subjected to the authority and supervision of the

#### SELECTION OF PUBLIC OFFICERS

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state commission by vesting in it the right to approve or disapprove of local rules and the power of removing local commissioners after a hearing.

##### *Minnesota Civil Service*

When the investigations of the efficiency and economy commission were made the state of Minnesota had only the beginnings of a merit system. Formal competitive examinations for appointments were provided in only two departments. The commission expressed its strong approval of a general merit system covering all except a small number of specified officers and made its plea for such a system one of the three general divisions of its recommendations.

The bill proposed in the final report of the commission (pp. 6, 16, 49, 50) provided for a board of civil service appointed by the governor, consisting of three members not more than two of whom shall belong to the same political party. The members should be unpaid and serve six years. It was further provided in order to prevent a single administration from altering the board in the interests of political spoils that one commissioner be appointed every two years. The executive officer of the board should be a commissioner of civil service appointed by and responsible to the board. Beside the supervision and direction of all examinations the following duties were to devolve upon the board:

Inquiry into the consideration of the entire subject of the civil service of the state with the view of promoting its efficiency,

The working of special investigations into cases where there is question of a violation of the law relating to civil service.

Four classes of employees were to be excluded from the civil service:

1. Elective officials,
2. Directors and members of boards appointed by the governor with the advice and consent of the senate,
3. The superintendent of instruction, the president of the university and all persons employed by either the board of education or the board of regents of the state university for instruction and scientific investigation,
4. The supervisors of the state fair.

It was further provided that candidates for positions requiring unskilled manual labor need not be subject to competitive examination but be placed on eligible registers in order of applica-

tion. With these exceptions all appointments, removals and changes in the status of officers and employes in the civil administration should be made subject to the civil service regulations.

The bill designated as appointing officers those elected by the people, those appointed by the governor and made exempt from the civil service provision, or officers to whom the latter may delegate their authority. It provided that "an appointing officer must base appointments, promotions and removals upon the recommendation of the officer in immediate charge. Thus the appointment of a clerk in a bureau would be made on the recommendation of the head of the bureau by the head of the department. This plan secures unity in the service of the several departments, while it prevents appointing officers from overriding those directly in charge of the work." (Preliminary Report, pp. 13-14.)

All candidates for positions under the civil service should be subjected by the board to an appropriate examination. This examination should so far as possible be of a practical nature. Evidence, however, which is satisfactory to the board of previous education and experience may be accepted instead of other tests, this method to be followed especially in filling positions requiring high technical qualifications.

Three forms of examinations would be permissible under the proposed law (a) competitive examinations open to all persons having the necessary preliminary qualifications, (b) limited competitive examinations, open only to such number of persons, not less than three, as may be prescribed by the board, such persons to be designated as candidates by the appointing officer, (c) non-competitive examinations, open only to the one person designated by the appointing officer. (Final Report, p. 7.)

The cases where limited and non-competitive examinations might be held are set forth in the recommendations. These include private secretaries and confidential clerks, bureau chiefs and others in similar positions, and insane hospital attendants.

The names of persons who pass successfully shall be placed upon registers in order of rating according to the proposal and whenever an appointment is to be made the names of the first three shall be placed in the hands of the appointing officer.

"A novel provision of the bill is that in regard to promotions. In most governments, including that of Minnesota, the steps between the various salary grades are so wide that promotions can be made only at rare intervals. Moreover there is no sys-

tematic classification of positions according to the character of work and the degrees of responsibility required. Much more may be paid for precisely the same work in one branch of the government than in another. For these reasons, the bill provides that the governor, after consultation with the civil service commission and with the heads of departments shall classify all the positions in the civil service according to the nature of the duties and the degrees of responsibility. He shall establish salary grades with comparatively narrow steps, within each class. The classes and grades for different departments shall be as nearly similar as possible." (Preliminary Report, pp 14-15.) It was further stated that while this classification and gradation may be temporarily made by the governor it must subsequently be approved by the legislature. The proposed bill provided that the efficiency of every employe be rated by his immediate superior. These ratings should be filed with the appointing officer and with the civil service board. Any person not below a fair standard of efficiency, as indicated in these ratings might be promoted by a single grade in a single year without action of the board. The board might veto, however, the promotion of a person below a certain standard of efficiency. All cases of rapid promotion require the approval of the civil service board.

Within a department transfers should be made by the appointing officer; between departments with the consent of the board.

The appointing officer should have absolute power of removal and demotion if recommended by the officer immediately above the employe in question. Abuse of this power would be prevented by the powers of investigation possessed by the board. The board moreover would be empowered to remove an official who is charged with inefficiency by his superiors.

To facilitate the enforcement of the civil service requirements it was provided that the auditor and treasurer should be prohibited from issuing a warrant for the compensation of any person unless the appointing officer should certify that he held the position in accordance with the civil service act. Penalties were provided for the violation of any provisions of the act and any appointing officer making an appointment or promotion contrary to the provisions of the act, would be personally liable to the person so appointed or promoted for his salary. Finally it was provided that political assessments should not be solicited from any officer or employe in the civil administration.

CHAPTER III  
PROPOSALS CONCERNING GENERAL  
ADMINISTRATION

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It has been customary in treating of state administration, to distinguish between those agencies which have a general relation to the government and those which perform special public services. The first group of agencies has been variously named and includes those branches of the administration which are essential to the state in equipping itself for service, and which the state must perform in acting as a proprietor. This group includes the older offices of the state as well as certain new departments such as the state purchasing department or the budget commissioner. These agencies are discussed in this chapter under the general head of "general administration." The second group of administrative officers and departments which perform the special functions which are of later origin, will be considered in another chapter.<sup>1</sup>

Most of the reports under consideration make the distinction here indicated with more or less clearness. The exact functions included within the general administration vary somewhat according to the governmental structure of the particular state, the point of view and the purposes of the investigation; but their agreement is sufficient to enable a treatment of the recommendations according to a classification of the functions usually listed under general administration.

The field of general administration includes the following functions:

1. General supervision of the administration, universally vested in the governor
2. The supervision of the state finances ordinarily vested in the auditor or comptroller
3. The administration of taxation
4. The administration of finances and the custody of funds by the treasurer
5. A group of miscellaneous functions of lesser importance, such as the supervision of elections, the custody of

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<sup>1</sup> For the distinction here made, see MUNICIPAL RESEARCH, No. 61, pp. 105-107; Mathews, Principles of American State Administration, pp. 134 and 156.



state property and the preservation of records all of which are commonly vested in the secretary of state

6. The formulation of legal advice for the administration and the representing of the state in court, usually the duties of the attorney-general

7. Recruiting the administrative service through a civil service commission or board

8. Purchasing services other than personal, such as supplies, equipment and printing

9. Expert assistance to the head of the administration, for the measurement and standardization of service and the preparation of estimates.

As has been pointed out in a preceding chapter, the commissions in general sought administrative reorganization without constitutional amendment. Therefore most of the older officers of the state which are usually classed under general administration and are protected by constitutional provisions were not treated in a comprehensive manner. The commissions, however, sought in most cases to bring about more simplicity by recommending changes in the statutory duties of many of them. There is ample evidence of an attempt to urge upon the state the need for the creation of the newer general agencies, such as a purchasing department or a budget commissioner.

In the above list of general functions, number seven has already been treated under the section on civil service while the administration for the preparation of a budget is reserved for a separate chapter. We shall group the recommendations affecting the remaining six under appropriate headings.

#### *General Supervision of the Administration*

Our consideration of the appointing power has already indicated a well defined attempt to centralise control and responsibility in the governor. In practically all cases where new purchasing or budgetary departments were recommended absolute control of them is to be vested in the governor.

In only one of the reports has the office of the governor been subjected to a special study. The Colorado report contains a section dealing with the office in which, in addition to the recommendations tending to increase the appointing power of the governor already mentioned, it is suggested that various duties of a minor character now vested in the governor be taken from him and vested in other minor officials. Among these are the

duty of editing reports of state departments, of acting as one of a board to make purchases, and of signing vouchers for the payment of certain salaries.

It is evident that the budget officer should be very close to the governor and in the course of his duties in preparing the estimates should serve as an expert investigator and as an aid in checking up and standardizing the services of the various branches of the administrative machinery. As will be shown in the chapter on the budget where such wide powers are recommended for the budget officer such officer is in every case placed very close to the governor.

It is further to be desired that the governor in his direction of the administration should have the means for enlisting the advice and co-operation of his chief subordinates. The old plan of allowing the governor to require in writing a report or opinion from officers of the administration is far from an adequate means of bringing this assistance to him. The idea of a governor's cabinet or council seems to have originated in the need of this co-operation. It is worthy of remark that from the time the original colonial governor's council gave place to the state senate with entirely different functions there had been no attempt to form a body of advisers for the governor prior to the use of the recent idea of a governor's cabinet.

According to the report of the efficiency engineers employed by the Iowa committee on retrenchment and reform, the director general of each of the seven executive departments should be a member of an "executive council." The governor should be chairman of this council. This should replace the existing executive council made up of the elected officers of the administration. The later report of the committee on retrenchment and reform, while it reduced the number of administrative departments to three, retained the idea of a governor's council. "Instead of each department being left to pursue its own course wholly or substantially independent of all other departments, all would be welded in co-ordinate activity, minor department heads under the great department leader, the three department leaders laboring together, and all in co-operation with the governor as supreme head, becoming, in fact, the cabinet of the governor and responsible for his policies." (Preliminary Report of the Committee on Retrenchment and Reform.)

Under the plan of the Minnesota commission, the directors of the six administrative departments "will constitute a governor's

cabinet similar to the cabinet of the President of the United States. The administration thus becomes a unit." (Preliminary Report, pp. 10, 11.) There is no mention of a governor's cabinet in the proposed bill issued as the final report of the Minnesota commission. It may be assumed that it was the intention of the commission to give such a cabinet no legal existence but leave it to custom and the initiative of the governor.

*Supervision of Finance—The Auditor*

Three requirements seem to be necessary to the office of auditor or comptroller in the opinion of most of the commissions:

1. Independence of the auditor
2. Freedom from all duties except those of auditing the receipts and expenditures of the state treasury
3. Adequate methods of accounting

*Independence of the Auditor.*—The necessity for independence in the auditor is emphasised in the Illinois staff report as follows:

"This official is elected by popular vote in all of the states except New Jersey and Tennessee,<sup>1</sup> where he is chosen by the legislature. His term in most cases corresponds with that of the state treasurer; and like that official this is sometimes for a shorter period than the governor; but in a few states the auditor has a longer term than the treasurer, as in Illinois, Minnesota and Ohio (four years); and Pennsylvania (three years). These factors serve to emphasise the independence of the office from the chief executive but none of the states have placed the position on the basis of judicial tenure, as are most of the auditing officials in Great Britain, and most of the countries of continental Europe." (J. A. Fairlie, in Report of the Economy and Efficiency Commission, p. 148.)

*Duties of the Auditor.*—Many recommendations are made for an alteration in the number and nature of duties imposed upon the auditor. In Iowa it is recommended that he retain only the accounting functions. In Minnesota "the auditor shall be the chief accounting and auditing officer of the state. He shall see to it that all laws relating to the finances of the state are enforced. He shall verify the correctness and validity of all financial claims against the state and of all financial obligations to the state. He shall see to it that all expenditures and obligations of the state are within the appropriations available and are charged to the proper accounts. He shall conduct all financial transactions of the state with its counties. He shall check all receipts and all expenditures and disbursements of the state. No expenditure or disbursement of state moneys shall be made except on warrant

<sup>1</sup> The auditor is also chosen by the General Assembly in Virginia.

of the auditor. . . . All powers and duties conferred by law on the public examiner shall devolve upon the auditor." (Final Report of the Efficiency and Economy Commission, pp. 14, 15.)

In Illinois, he should, according to the committee, retain his existing functions and extend his work over the auditing of all state officials and in addition should have power of auditing the accounts of all county officials. (Final Report, p. 36.)

In dealing with the duties of the auditor general of Pennsylvania, the efficiency and economy commission says that while the auditor general has the ordinary powers of examining the accounts of the state he, with the treasurer, has been vested with the authority to assess and collect taxes. "The corporate taxes collected by this state comprise 60 per cent of the state's revenue. The centralizing of these assessing, collecting, and auditing duties in the auditor general and the state treasurer places them in the anomalous position of assessing and collecting the state's revenues, disbursing them, and then auditing the assessments and disbursements made and authorized by themselves. Centralization of authority seems to have been carried to extremes in this matter. . . . When the vast amount of work entailed by the discharge of these duties is considered, it is apparent that no man can discharge them with the highest efficiency. We therefore recommend:—that a commission be created to be known as the state tax commission, composed of three persons, one to be appointed by the governor, one by the auditor general and one by the state treasurer and that the assessing and collecting of all state taxes be transferred from the auditor general and state treasurer to the tax commission." (Report of the Economy and Efficiency Commission, p. 15.)

*Uniform Accounting:*—As has been mentioned in a preceding chapter, one of the duties imposed upon the Wisconsin state board of public affairs was to install uniform cost and accounting systems in state departments and institutions. An investigation was therefore made of departmental and institutional accounts, accounting records, cost systems and reports. The results of the investigation were set forth in a report together with criticisms of existing methods and recommendations for remedying the same. Among the latter is a uniform plan for state accounting for the departments of administration. The system has been installed in more than a score of institutions and departments of the state. The uniform plan designed by the board is thus described in their "General Report":

PROPOSALS ON GENERAL ADMINISTRATION

The uniform accounting plan designed by this board placed primary importance upon the four following phases of state accounting and reporting:

- a. Accounts and records which will currently and accurately record facts relative to assets, liabilities, revenues and expenditures.
- b. Accounts and records which will currently and accurately show separately the cost of operation, costs of property repairs and expenditures for permanent property.
- c. Accounts and records which will currently and accurately record facts pertaining to appropriations and other authorizations and limitations for expenditures, and which by comparison with the records described under (a) and (b) will show to what extent estimated revenues have been realized and to what extent appropriations have been used.
- d. Regular and prompt reports which will make available to officers and to the public the information recorded in the accounts above described. Such reports must also set forth, by means of non-technical statistics the accomplishments of each department or activity of state so that results secured may be compared with costs to produce such results.

The board in prosecuting its plan of installing new accounting systems recognized the fact that if the proposed systems were to be installed under circumstances that would reasonably insure their success, it would be necessary to make the process of installation an evolutionary one. It was believed that the state employes concerned in the operation of the accounting systems, would have to adapt themselves to the many radical changes in accounts and accounting procedure, step by step.

It was recommended that the installation of new accounting systems, based on the uniform plan of classification, be installed in the remaining departments and institutions as fast as possible. The new plan contemplated that the secretary of state should maintain proper controlling accounts over all departmental and institutional accounting records. It was particularly urged, therefore, that as soon as possible a completely new system of accounts and accounting procedure be adopted by the department of state so as to centralize and co-ordinate all of the accounting activities of the various state departments.

The New York state commissioner of efficiency and economy had the power, as is mentioned in a preceding chapter, to compel other departments to keep all their accounts and books in the manner he prescribed. This resulted from the clause in the law authorizing him to "require" the departments to furnish upon forms prescribed by him "all such detailed information touching the business, accounts, affairs, and administration . . . as he may demand, and it is hereby made the duty of all the officers . . . to furnish such information in such form." In other

words, the commissioner might set up new forms of accounts throughout the state and require the departments to furnish the reports on these new forms to him, and, either the departments would be obliged to keep their accounts in the old way as well as the new or else, in order to prevent duplication of work, they would be obliged for convenience to alter their methods to conform to the new system. This power was never imposed to that extent, but the effect of its existence was instrumental in securing the installation of a new system of accounts and uniform methods of bookkeeping and reporting in the state institutions.

The Illinois investigations included a study of "The Accounts of the State of Illinois," by George E. Frazer and of "Accounting Administration for Correctional Institutions" by Spurgeon Bell. Both of these studies are printed as appendices to the report of the committee. In addition to a detailed statement of present accounting methods these studies set forth a number of recommendations which are referred to in the committee's report as follows:

"In addition to the proposals to establish the administrative machinery and authority for an adequate system of public accounting in the state, the Committee has had prepared a special report on the present accounting methods, a general basis for an accounting system, and a detailed classification of accounts for the penal institutions of the State, as an illustration of the general plan. . . . Special attention is directed to them as examples of what is needed to provide satisfactory public accounts. The general basis for an accounting system calls attention to the requirements which should be met by an adequate accounting system, to be formulated under the direction of the proposed finance commission; and the classification of accounts for the penal institutions, which has been based on a comprehensive survey of the present accounts and business methods of these institutions, is in such detail as to be available for the use of the proposed Board of Prison Administration, or indeed of the existing boards of commissioners and managers." (Illinois Report of the Efficiency and Economy Committee, p. 38.) It is further recommended that the auditor be given the power of auditing the accounts of all state and county officials.

The Minnesota report states that "the auditor shall establish and enforce uniform accounting systems throughout the state."

The following extract from the report of the Pennsylvania commission indicates the recommendation made by them as to state accounting:

"While the moneys of the Commonwealth are expended by many Departments, Bureaus and Commissions, this Commission sees no reason why the necessary accounting and bookkeeping should not be unite of a uniform system. In many Departments where the accounting system is carried on upon a large scale, it is very complicated. This is the result of patching old systems when new ones should have been introduced.

"We, therefore, recommend that legislation be enacted creating a Commission, consisting of the Banking Commissioner, the Auditor General and the State Treasurer, to investigate accounting and bookkeeping

systems and to adopt one that can be used in all Departments of the State Government." (Report, p. 6.)

The first recommendation made in the report of the Alabama legislative investigating committee is a straightforward demand that the "most competent certified accountant that can be obtained" be employed to "put the State of Alabama upon a business basis at once." This expert should install a modern, simplified system of accounting for all state departments and in all other offices which handle state funds and are subject to state supervision. It was recommended that the legislature appropriate the sum of \$4,500 for this purpose.

The Colorado survey report provided for the abolition of an existing state auditing board which has part of the powers of auditing the accounts of the state departments. The functions performed by this board should, in the opinion of the investigators, be vested in the auditor. The report contained a very detailed description of the existing methods of accounting and made sweeping recommendations for changes in accounting methods. The main purpose of the changes seemed to be the centralization of the entire accounting system of the state, in the auditor's department. (Summary of Findings, pp. 10-15.)

The Kansas committee suggested that "a universal system of accounting" be provided by legislative acts.

#### *Tax Administration*

The subject of tax administration has received a vast amount of specialized attention in the American states. It is not to be thought, therefore, that the efficiency and economy commissions have considered it within their scope to enter into the field of taxation with a view to giving it adequate attention. In only one of the investigations has the subject been given noteworthy study. The Colorado committee engaged the services of special investigators in the field of taxation with the general results noted below. Four of the other commissions gave incidental attention to the problem of tax administration and suggested some change in existing methods.

In the second report of the New Jersey commission the results of an examination of the administration of taxation were set forth. It was shown that the state board of assessors and the state board for the equalization of taxes were performing services which could, in the opinion of the committee, be more readily performed by one board. It was therefore recommended that the two be consolidated into a new board of five members. While

no suggestion of the duties to be performed by the new board was made, the commission probably intended it to assume the entire functional activity of the two existing boards.

The Illinois committee stated in its report that the existing arrangements for the assessment of property for taxation were notoriously inefficient and unfair; the collection of public revenues was lax and the cost of collection unequal. The finance commission proposed and described elsewhere should include a tax commissioner and a revenue commissioner; the former to exercise supervision over local assessors, make original assessments of the properties of corporations, associations, railroads, and other public utilities, subject to review by the finance commission; the latter to control the administration of the inheritance tax and automobile licenses. Some recommendations were also made concerning local administration of taxation.

The Pennsylvania commission recommended the creation of a tax commission composed of three persons, one to be appointed by the governor, one by the auditor general, and one by the state treasurer. The assessing and collecting of all state taxes should be transferred from the auditor general and the state treasurer to this tax commission.

The Minnesota commission recommended the creation of the board of taxation consisting of three members to be appointed by the governor for two years, the duties of this board to include supervision over the assessment and equalization of taxes. All duties under existing laws vested in other officers should be transferred to this board, it was stated, except that the attorney-general should retain his right to bring and maintain actions at law in tax questions.

The whole administration of taxation and revenue in Colorado was at the direction of the survey committee of state affairs studied and reported on by Professors Seligman and Haig. This report has already been published by the committee and a subsequent report recommending changes in the state tax laws has been promised.

The Kansas committee recommended one tax commissioner instead of a tax commission of three.

#### *The Custody of State Funds*

"The Treasurer is by law the receiver and custodian of state revenues, and the disbursing officer for appropriations from state funds. He is placed under heavy bond to secure the state in case



of loss. He is usually a member *ex officio* of various financial boards, such as boards of equalization, sinking funds and land funds; and less frequently is a member of other *ex officio* boards. In some states other miscellaneous duties not connected with finances are placed on the Treasurer.

"Reports of receipts and expenditures are made by the State Treasurer to the legislature. But these are usually brief summaries, while the more detailed statements are presented by the Auditor or Comptroller. The Treasurer's office in most states is limited to formal and ministerial functions, controlled by the Auditor or Comptroller. In no state does he have any duties or influence on the appropriations or revenue laws, such as forms the important work of a Finance Minister in other countries.

"Under the earlier laws, the Treasurer was assumed to have physical possession of the state funds,—and he was personally responsible for them; so that if he deposited any amounts in banks he did so at his own risk. With the increase in the scale of financial transactions and the accumulation of large balances at times, the states have either provided vaults for the custody of state funds, or have authorized deposits in banks." (Report of the Illinois Efficiency and Economy Committee p. 147).

With the increasing tendency to take from the state treasurer all discretion as to the placing of state funds and to reduce his activities to the mere function of accounting for them, we might expect a tendency among the efficiency and economy reports to reduce his duties still more and to make the office appointive. Yet the state treasurer has received in these reports very little detailed attention except in the Illinois report above quoted. Specific recommendations concerning the treasurer appear in the reports of the following states: Iowa, Illinois, Minnesota, Colorado, and Kansas.

The Iowa recommendation suggests that the state treasurer be made a mere custodian of the state funds and that in due time his office be abolished and his functions transferred to other administrative departments.

As is mentioned elsewhere the Illinois committee makes a place for the treasurer in the proposed state finance commission. (Report of Efficiency and Economy Committee, pp. 35-36.) As he is a constitutionally elective officer in Illinois, he should in the opinion of the committee remain custodian of state funds with power to deposit the same in banks. "Reports as to the

deposits of state funds in banks should be made and published from time to time." (*Ibid.*, p. 82.)

In the preliminary report of the Minnesota efficiency and economy commission one of the six great departments recommended is that of finance. The treasurer, an elected official, should be head thereof with duties described as follows: "Naturally the Treasurer remains in this plan the chief financial officer of the state. As such it is convenient to lay upon him certain executive duties. For the sake of uniformity the collection of all taxes is assigned to him. A purchasing bureau for office supplies and the like is placed under him, including the purchase of printed matter. Following the purpose of relieving the Governor of all administrative details, the care of the state capitol is given to the treasurer, a duty conformable to his custodial functions" (p. 23). An advisory board to the department with control of trust funds should be composed of the governor, treasurer and auditor.

In the final report of the Minnesota commission a radical change is made in this proposed plan. The treasurer remains one of the general officers with duties defined as follows: "The treasurer shall be the chief financial officer of the state. He shall be custodian of all state funds; he shall receive all moneys due the state and shall enforce their collection; he shall make all disbursements.

"Except as otherwise provided in this act, all powers and duties now conferred by law on the treasurer shall continue in him." (Final Report, p. 16.)

The Colorado survey committee made somewhat detailed study of the administration, of the duties of the treasurer, and in its report set forth a number of recommended changes. These include alterations in books, records and accounts; in methods of receiving state funds and other moneys; in general ledger transactions; in funding methods; and in the time and manner of issuing reports. It may be noted that the powers of the treasurer over purchases were to be transferred to the proposed central purchasing department.

The Kansas committee urged the passage of an act providing that all fees collected by any department be deposited daily and forthwith remitted to the state treasurer. This requirement was intended to eliminate the existing custom of the direct expenditure of fees by the department collecting the same.

*The Miscellaneous Functions of the Secretary of State*

The secretary of state has no characteristic function which distinguishes him from other officers. His position in the state administration since Colonial times, has diminished in importance. His functions, however, have been vastly increased, until at the present time, it seems to be the practice of state legislatures to give to the secretary of state whatever duties seem to be miscellaneous or unclassified.

"The duties that devolve upon the secretary of state have therefore become heterogeneous and complex. For example, in Illinois he is keeper of the records, custodian of buildings and grounds, repairer and replenisher of the furniture of the state house, custodian of fuel and stationery for the general assembly, supervisor of public printing, supervisor of the organization of many classes of corporations, registrar and licenser of automobiles, examiner and licenser of chauffeurs, sealer of weights and measures, licenser of itinerant peddlers, recorder of trade-marks, certifier of notaries. He has further a number of duties connected with state elections. He is in addition an *ex officio* member of nine boards whose duties vary from canvassing primaries to keeping in repair of the Lincoln homestead." (See Final Report of Illinois Efficiency and Economy Committee, pp. 943-952.)

The Illinois committee recommended that many of these duties be transferred to more appropriate departments. The registration of motor vehicles and the licensing of chauffeurs should be transferred to the department of finance. The public printer should take the duties of the secretary of state connected with state publications; the superintendent of buildings and grounds should be appointed to take over the duties of secretary of state connected with the care of buildings and grounds; the election board should have charge of elections. A suggestion was made which would involve the amendment of the constitution to the extent of making the secretary of state appointive, but this proposal was not given the force of a recommendation. It is worthy of note, however, as illustrative of the tendency of thought regarding the secretary of state and his functions:

"If the secretary of state were made, as he should be, an officer appointed by the governor the loss of some of his present functions could be offset by the transfer to his department of other services and by giving his department more complete control over some matters over which it has now only partial control. Thus, the secretary of state, in addition to his primary function of keeper of records, could continue his duties in relation to election; and the superintendent of buildings and grounds,

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superintendent of printing, and the civil service commission, could appropriately be attached to this department. While this would not make a coherent department of closely related functions, it would make a department of some importance, uniting a number of services not easily assignable to other departments.

"This plan, however, involves an amendment to the state constitution as to the method of selecting the secretary of state. Under the existing provisions, the concentration of responsibility can best be secured by placing the superintendent of buildings under the proposed department of public works, and by making the superintendent of printing directly responsible to the governor." (Final Report, Efficiency and Economy Committee, p. 952.)

The report of the New York committee of inquiry pointed out that the cost of collecting the motor vehicle tax by the secretary of state was excessive. It made the recommendation that the collection of this tax should be a duty of the highway department.

The Minnesota commission recommended that the secretary of state be "no longer required to keep an eye on ditch contracts, or to do other things inconsistent with his duties," but be only "the chief recording and elective officer of the state," the word "elective" in this sense meaning connected with election.

The Iowa committee stated that it would leave to the secretary of state only the recording part of the state's affairs.

The Colorado report stated that the office of secretary of state in Colorado seems to be, "a dumping ground for activities or duties which cannot be placed in some other office." The main body of the recommendations concerning the office were concerned with transferring duties from the secretary of state to other more appropriate branches of the administration. The following tabulation indicates some of the changes proposed:

THE EXISTING DUTIES OF THE SECRETARY OF STATE	SHOULD BE TRANSFERRED TO
a. The compilation, etc., of agricultural statistics	State Board of Agriculture
b. The tabulation, etc., of statistics relating to poor persons	State Board of Charities and Corrections
c. The filing of reports of district attorneys d. The charge, care and custody of state property e. The examination, etc., of unserviceable personal property of the state f. The issuing of certificates of rent due, etc.	Auditor of State
g. The procuring of rooms for various departments and offices	Board of Capitol Managers of their successors

*The Attorney-General*

The attorney-general is usually in name the head of the legal department of the state government. His duties are the formulation of legal opinions for the various officers and departments of the state government, and "a general responsibility for the enforcement of state laws."<sup>1</sup> His power in connection with the first of these duties in many states has been seriously limited by assigning to the various departments legal advisors who are in no way subject to the jurisdiction of the attorney-general. The second duty, that of enforcing the state law through legal proceedings is limited seriously by the creation of prosecuting officers in each county, who are generally elected and in no effective manner subject to the direction of the state attorney-general. The reports which give attention to the office have chiefly directed attention to the defects above mentioned.

In Iowa, the efficiency engineers employed by the commission recommended the combination of the two offices of secretary of state and attorney-general in a legal department but proposed no change in the duties of each.

The Illinois committee found that the chief defect in the administration of the legal business of the state was in the fact that local prosecuting and other public attorneys are in no way connected with the attorney-general's department.<sup>1</sup> As a result of this, no central responsibility was assured for legal services and advice given to state officials. Conflicting opinions with the possibility of unnecessary litigation and expense naturally resulted. The committee recommended the following solution:

"The committee believes that it is important that there should be uniformity and harmony in the legal services performed for the state; and that this work naturally comes under the supervision of the attorney-general. At the same time there seems to be need for assigning particular attorneys to certain departments; and there is no adequate control over state's attorneys. It therefore recommends that all attorneys for particular departments or officers should be appointed by the attorney-general, with the approval of the governor, and be subject to the supervision of the attorney-general; that the attorney-general be given larger powers of supervision over the state's attorneys in the several counties; that state's attorneys be subject to removal for cause by the attorney-general, with the approval of the governor, and that the attorney-general be made removable by the governor for specified cause." (Final Report, p. 70.)

According to the report of the Minnesota commission the attorney-general should be relieved from the administration of the inheritance tax, from the duty of deciding when timber is ripe to be cut, and from passing on any but purely legal questions.

<sup>1</sup> Illinois Efficiency and Economy Report, p. 956.

The Pennsylvania commission disapproved of the practice of employing individual counsel for certain departments, saying that it is both expensive and unsatisfactory. It recommended, therefore, the formation of a department of justice similar to that of the federal government to provide all legal services for all departments comprising the state government. In making this recommendation, it took advantage of an article in the constitution which enables the appointment of the attorney-general by the governor. (Report, p. 16.)

#### *Concentration of Purchasing*

Practically all of the commissions considered the question of purchasing supplies for the various departments and institutions of the state government. The 1913 report of the Massachusetts commission on economy and efficiency stated that the commission had given careful attention to the question and promised a later special report on the subject. In passing, it mentioned the difficulties attending the creation of a central purchasing department and indicated briefly the magnitude of the problems involved. Among these is mentioned the need for large storage facilities, the determination of the amount to be purchased and the elaborate system of accounting and management involved. The special report on purchasing promised by the commission had not yet appeared at the time of this writing, and the commission has been abolished.

The Illinois committee found that under the existing centralized control of state institutions under a board of administration, the purchase of supplies for the institution is concentrated in the board. The committee found little to criticize in the methods followed in the purchasing of these supplies. It recommended that responsibility and control over printing, binding and stationery supplies for the state offices be centered in a superintendent of printing, and that providing for fuel, light, telephone service, office furniture for state offices, should be vested in the superintendent of buildings. General contracts for these services and supplies should be based on competitive bids and made by the proposed state comptroller with the approval of the governor. "Lump appropriations to cover these contracts may be continued; but the expense incurred for each department or office should also be charged to it, and included in the report of its expenses." (Report, p. 39.)

The Minnesota commission provided that under the department of public domain proposed in their plan, there should be a bureau of buildings and purchases, under a commissioner, part of whose duties should be the supervision of "the purchase of all printing for the state and of such classes of furniture, equipment and supplies as the governor may designate for such offices and departments as the governor may direct." (Final Report, p. 24.) In addition, it is suggested that this commissioner should keep records of prices paid by every branch of the civil administration for all classes of commodities and supplies, according to the specification for each. Purchasing for the university and for the proposed department of public welfare should, in the opinion of the commission, be exempt from this general purchasing bureau.

The commission on reorganization of civil administration of Minnesota recommended that the existing board of control of state institutions be given entire control of the purchasing of state supplies and equipment. It found that the board already purchased the larger part of the supplies needed by the state and that economy would be served if the remainder were purchased in the same way. In addition it suggested that the board should assume control over the state capitol building and contract for all of the state's printing.

The Kansas efficiency and economy committee approved the idea of a state purchasing agent but did not specify any details as to his powers or duties.

The Alabama committee proposed the concentration of purchases for all departments of the state government and the control thereof in the hands of the secretary to the governor. All requisitions from the departments for supplies would be passed upon by a state board of purchasing consisting of the governor, auditor and treasurer.

The Colorado report recommended the establishment of a central purchasing department, "to take over, wherever such action would be for the best interest of the state, the purchasing of all supplies and equipment for the state" (p. 46). With the power of purchasing should go the control over supplies kept in store-rooms, in departments and institutions, to prevent overstocking. The purchasing department should also be empowered to purchase supplies and equipment under the most desirable market conditions. It was further recommended that a thorough standardization of supplies should be made.

The Pennsylvania commission recommended the creation of a

board of public property to assume the duties of the existing board of commissioners of public grounds and buildings and to supervise the planning and erection of all public state institutions. In addition this board should have the duty of purchasing supplies and of studying the equipment needs of all state departments "in order to determine whether or not their purchase and distribution could be made more advantageously and more economically through such a centralized board." (Report of the Economy and Efficiency Commission, Pennsylvania, p. 14.)

The broadest study of purchasing methods made by any of the commissions was that completed during the year 1915 by the New Jersey economy and efficiency commission. The results thereof are set forth in the fourth annual report.

A wide investigation was made by the committee into methods of purchasing in the Federal government, in a few states where some progress has been made in concentration of purchases and in a number of private corporations. The New York City system was especially noted, while a number of research bureaus were consulted. Lists of expenditures by various state institutions were tabulated in the report to indicate the lack of economy in the existing methods of purchasing by each separate department.

The conclusions of the committee were that several conditions should accompany centralization of purchases:

1. The establishment of standardization of quality for all supplies purchased;
2. Real competitive bidding;
3. Inspection of materials offered for sale and subsequent inspection of material purchased.

These safeguards, together with evidences as to the undoubted economy resulting from the purchase of material in large quantities and the relieving of the authorities of the individual departments and institutions from the detailed work of purchasing, were set forth with clearness and emphasis.

With the report was submitted a bill embodying the recommendations of the commission for a central purchasing department. This bill provides for the establishment of a purchasing board consisting of the governor, the state treasurer and the state comptroller. Provision was also made in the bill for a purchasing agent to act in accordance with the direction and supervision of the board. This commission and purchasing agent in



co-operation with the heads of the departments, should work out the details of operation, "in which they will find much to guide them in the experience of the present heads of state departments and institutions as well as in the experience of the purchasing committee of New York City and the Federal Government." (Fourth Report, p. 24.) It was recommended that the controller certify to the board as to the availability of funds for use.

The report further stated:

"The required co-operation between the heads of the departments and institutions and the Purchasing Board can only be stated generally in terms in a legislative act. Much, however, will depend upon the spirit of this co-operation between the Purchasing Board and the departmental and institutional heads. It is believed by your Commission that if this element receives sufficient consideration at the hands of the Purchasing Board not only will difficulty be eliminated, but a greater elasticity in operation and efficiency in result will be attained.

"It seems hardly necessary to emphasize the desirability of standardization of quality involving almost universally, in the most efficient operation of purchasing systems today, a laboratory determination of quality as distinguished from advertisement, trade-mark or manufacturers' representations; in such tests alone lies a proper guarantee of quality. This applies all along the line from coal to spices, and by such inspection tests after delivery can the contract requirements be best enforced.

"Of course, there must be in any such system sufficient freedom for the purchase of articles in a nearby market by a using agency, either when these articles are perishable by nature and therefore can only be filled from a nearby market, or when there is no advantage in price from large contracts by reason of freight charges or otherwise, or as in the case of the State Normal School, where necessity, for instance, for fresh vegetables exists, which may not apply to the same extent elsewhere. The possibility of such a latitude your Commission believes it has covered in the proposed bill, while suggesting that this discretion should be carefully exercised in order to avoid the possibility either that the necessary standards will be broken down by this means, or that it will be used as a possible means of escape from the operations of the Central Purchasing system." (Fourth Report, p. 25.)

## CHAPTER IV

### THE BUDGET

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It is significant that with two exceptions every commission under consideration makes some recommendations for budgetary reform. In all cases except one, that of Wisconsin, the thought of the commission seems to have turned to an executive rather than a legislative budget. As to the form for the presentation of estimates some of the commissions have made a considerable advance over existing methods. This is especially true of Wisconsin. The three permanent agencies all express the idea that the functions of an efficiency commission should include the preparation of a budget. The New York department was required by statute to submit recommendations on appropriations.

But beyond the preparation of the budget and its submission to the legislature, the reports have in most cases not ventured concrete suggestions. This is evidently due to the fact that in all states except Colorado constitutional changes are not contemplated. A study of the details set forth in this chapter raises a doubt whether the progress of real budgetary reform should be confined to mere attempts to secure statutory enactments. To secure a direct constitutional amendment such as that of Maryland<sup>1</sup> is perhaps less difficult than to establish through custom sound and complete budgetary procedure.

#### *The State Board of Public Affairs of Wisconsin*

The board of public affairs of Wisconsin has in the last two or three years of its existence given primary attention to the compilation of budgets. In performing this function it has been and still is, acting as an agency of the legislature rather than of the governor. Wisconsin has in no sense an executive budget.

The chief publications of the board in connection with its work on the budget are "The Budget," a monograph describing budget procedure in detail (prepared for the board by S. Gale Lowrie); and the budgets for 1913, 1915 and 1917.

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<sup>1</sup> The Goodnow commission of Maryland is not considered in this bulletin as its recommendations were confined to the budget. See MUNICIPAL RESEARCH, No. 80.

In 1913 and 1915 the board merely collected and edited estimates of both receipts and disbursements. The entire body of estimates thus compiled was published in a single volume and submitted to the legislature. The policy of the board up to 1915 is thus described in its general report of that year:

"The principal offices of the budget are to present to the legislature the following information:

- (a) Departmental and institutional expenditures and revenues in classified detail for the three preceding fiscal years
- (b) Digest of all appropriation laws
- (c) Departmental and institutional estimates and requests for appropriations for the next succeeding biennial period, together with estimates of revenues for the same period.

"The board, in the preparation of the budget, can be responsible for (a) and (b) only, i.e., for the accuracy of the history of expenditures and the accuracy of the digest of appropriation laws. All requests for appropriations come under (c) and are made by departmental heads or the heads of institutions. Although these estimates are presented to the legislature in the form prepared by the board, these requests for appropriations are in no way referred to this board, nor are these requests considered, controlled, approved or disapproved by the board of public affairs.

"The legislature in providing for the preparation of a budget recognised the insufficiency of accurate data necessary for the legislature to carefully plan the future expansion or contraction of state activities and a definite fiscal policy under which the state's affairs should be operated. That heretofore insufficient and inadequate data were available is an undisputed fact. The budget, therefore, as designed by this board, is a report compiled and assembled by the board of public affairs and transmitted to the legislature. By means of this report and first hand investigations by the legislature, it will be possible for the legislature to work out a complete definite working budget and fiscal plan for a succeeding biennial period" (p. 21).

A different policy was adopted in preparing the 1917 budget. The departmental estimates were reviewed both by field examinations and hearings before the board. On this basis the board prepared recommendations which were transmitted to the legislature in the form of a budget.

#### *The Commission on Economy and Efficiency of Massachusetts*

In the act creating the Massachusetts commission on economy and efficiency it was provided that every department of the administration should submit yearly to the auditor statements of the estimates for the ensuing year, the proposed appropriation for the current year and the reasons for increases where such were desired. These should be compiled, published in one document and submitted to the governor, the general court and the commission on economy and efficiency. It was made the duty of the commission subsequently to examine the estimates and report thereupon to the general court with recommendations both for appropriations and for raising revenue.

In addition to this, which was intended as a temporary improvement in methods of making appropriations, the statute provides that "it shall be the duty of the commission to . . . study into the possibility of promoting greater economy and efficiency and utility in the transaction of the business of the commonwealth . . . by the substitution of the budget method of appropriating money . . . and it shall report thereon . . . to the governor and council and to the general court if it is in session." (Acts and Resolves, Massachusetts, 1912 p. 800.)

While the commission during the four years of its existence complied yearly with the first of these provisions it was not until the month preceding its abolition in 1916 that the plan of budget procedure was completed and published. On April 29, 1916, the commission submitted to the governor and the general court a report on state revenues and loans. The preliminary steps toward the establishment of a budget system were set forth. Attention was called to the fact that a large amount of the state revenue was being spent without being appropriated. The report urged that this practice be stopped. Such an improvement should be the first step toward the formation of a budget system.

Shortly after this the commission submitted to the governor, council and general court a "Report on Budget Procedure." (Published as House Document, No. 2288.)

The report begins with an admirable statement of the essentials of a proper budget system, and sets forth as follows what the adoption of a budget system by the state would involve: "The adoption of such a system in this State would involve a number of important changes, such as the centralization in the Governor of control over departments and boards; the lengthening of the Governor's term; the inclusion of all revenue and loan transactions within the budget system; provisions for all estimates of expenditures and of revenues to be submitted to the Governor, with further provisions for giving him adequate facilities for the investigation of estimates and the preparation of a budget for submission to the Legislature; provisions for so restricting the Legislature that it could not increase but could only allow or decrease the Governor's budget unless it provided additional revenue for its proposed increase in expenditures; full publicity in all stages of budget making; and provisions for placing responsibility for past results as well as for the submission of a new budget." (Report on Budget Procedure, No. 2288, May 27, 1916.)

Such readjustments, the commission believed, would involve constitutional amendment and "the raising of questions on which there is as yet a great diversity of opinion."

A plan was therefore recommended which would vastly improve present procedure but would involve only changes in statutes and legislative rules. The recommendations made for immediate change may be summarized as follows:

1. The legislature should require that all bills, resolves and petitions for appropriations and bond issues be filed with the clerk of the house of representatives four weeks before the convening of the legislature.
2. That the commission on economy and efficiency should tabulate all estimates and requests and should investigate and report to the governor upon all estimates and requests.
3. That the governor submit to the general court, not later than the first week in February, a budget containing all estimates and requests, with his recommendations as to the amounts which should be raised by a state tax and by loans.
4. That a single appropriation bill be enacted for each department's expenses.
5. That appropriations be made, as far as possible, in the order followed in presenting the estimates in the governor's budget.
6. That definite budget days be designated by the general court for consideration of appropriation bills.
7. That appropriation acts be drawn in such a form as will afford means for an effective control over the expenditure of appropriations.
8. That definite standards be followed in the drafting of appropriation measures in order that a consistent and effective system for the granting of appropriations be insured.

The commission submitted with the report a somewhat detailed statement and criticism of existing methods of appropriation. It included also as an appendix a draft of an act covering the recommendations made.

#### *The Department of Efficiency and Economy of New York*

Immediately after the appointment of the commissioner, the department turned its attention to appropriations. The commissioner and the men that he first appointed had served on the governor's committee of inquiry and they carried through the work of the committee involving the appropriation bills passed by the legislature. At the close of the session of the legislature the governor referred all of the appropriation bills to the department, and reports were made to him recommending either approval or veto on bills and items, the commissioner holding hearings for the governor and reporting his recommendations. The report of the department which was incorporated in the "Budget Report of 1914," states that 131 such recommendations were made, in addition to the detailed inquiries into items in the general appropriation bills. These reports to the governor were

never published, and while the state records show here and there that the governor was guided by the commissioner, no summary of the number of recommendations followed or rejected by the governor was made public. The legislature held an extra session in the fall of 1913, following the impeachment of the governor and five special appropriation bills were prepared by the department and enacted into law. In the fall of 1913 the department began the study of the requests from departments for appropriations to be made by the legislature of 1914. The department co-operated with the comptroller in obtaining the tabulation of requests which the comptroller, under another law, was also required to collect, and then proceeded to obtain statements of reasons from the department for making the requests. Particular emphasis was placed upon the analysis of requests for "lump sum" appropriations, in order to ascertain what the department heads intended to do with the money. During December a number of hearings, covering all of the important departments, were held by the state board of estimate, and the commissioner, as secretary, conducted the examination of the department heads at the hearings. It was planned that the board of estimate should submit a report recommending the amounts of appropriations to be made, but this plan was abandoned, owing partly to the unwillingness of the chairman of the senate finance committee to agree to anything of the kind in advance of action by his committee and partly to the fact that the assembly had changed its political complexion and was in the hands of the "opposition." The governor appeared unwilling to work with the speaker of the assembly on a committee to frame appropriations.

With the opening of the legislative session of 1914, began much political maneuvering with the subject of appropriations as the main issue. The governor and a majority of the senate were Democrats; the assembly majority was Republican. The assembly majority leaders professed their intention of abolishing or "starving out" the department of efficiency and economy and the state fire marshal, both of which offices had been created by the preceding legislature. They alleged that the departments were created solely for political patronage and were otherwise useless. The chairman of the ways and means committee of the assembly, nevertheless, made use of the department to revise and correct his draft of the appropriation bill as to form and legal phraseology. The assembly leaders rushed through an appropriation bill omitting entire departments and activities of the government and sent

the bill to the senate for concurrence. The debate on the bill in the assembly occupied less than two hours and it was passed on March 12, 1914. The senate refused to concur in the bill and after much bickering, the legislature adjourned *sine die* in a deadlock between the two houses without passing any general appropriations for the support of government. On March 16, before the adjournment, the "Budget Report of the Department of Efficiency and Economy of 1914" was issued. This contained a close itemization of requests for appropriations, recommendations to reduce amounts by nearly \$6,000,000 below the requests, and a detailed form of appropriation bill which was followed in the appropriation bill that was enacted at a special session. The appropriation bill recommended by the department was more closely itemized than any that had been passed by the legislature up to that time. Subsequent experience caused the commissioner to modify somewhat his recommendations for such drastic itemization as was framed in 1914. At the special session of the legislature the senate yielded to the assembly and agreed that no appropriation should be included for the department of efficiency and economy for the fiscal year 1914-1915. The general appropriation bill was then passed by both houses. The compromise was publicly stated to be based on the theory that if the Republicans carried the state election that fall, the department would be abolished anyway, whereas if the Democrats were successful, the department could obtain a special appropriation immediately after the legislature met in January and could live in the meantime on the balance of the appropriation that was carried over from 1913.

In preparation for the session of 1915, the department of efficiency and economy made more elaborate studies than before of the amounts requested, the work program and the actual needs of the departments and institutions as observed by examinations made in the field. The results of this work were incorporated in Volume 1 of the Report of the Department which was issued in January, 1915. This volume contained an estimate of the revenues of the state, a statement of financial condition based on the comptroller's statement, the requests for appropriations with explanations of work program and the amounts as recommended by the department. The volume was submitted to a meeting of the board of estimate called by the newly elected governor early in January, and was then transmitted to the legislature. The governor, at the meeting, stated that he recognized the value of

this work, but he advocated the abolition of the department in message to the legislature. The department was preparing recommendations for a sweeping change in the organization of the state government and for a budget system at the time it was abolished. It was intended to submit these recommendations to the constitutional convention of 1915, as mentioned in MUNICIPAL RESEARCH, No. 63. A comparison of the acts of appropriation of 1915 with the recommendations of the department show that despite political differences, the legislature followed largely the recommendations of the report both as to form and amount but particularly as to form.<sup>1</sup>

#### *The Committee on Retrenchment and Reform of Iowa*

The committee on retrenchment and reform of Iowa recommended that the head of every division of the state government make a careful statement of the needs of his department for the biennial period showing in parallel columns the amount granted for the same purposes during the preceding period with comment as to its sufficiency or inadequacy for the use made thereof. The department head of each of the three proposed departments should summarize and compile these reports and submit the same to the governor. The governor should use these reports in making up the entire state budget and submit the same to the legislature. It was suggested further that the governor might supplement the information thus received from the department heads by his own investigations. "By this method the legislature may see at a glance what is required to continue the state's business the demands of every part of the state's business will be made public, and men of the class who fill these responsible offices will hesitate to endorse unreasonable expenditures." (Recommendations, p. 14.)

#### *The Efficiency and Economy Committee of Illinois*

The recommendations of the Illinois committee, based upon the comprehensive study of state finances made by Professor Fairlie, included a complete centralization of the administration of the state finances. In the proposed finance department the governing power should be a state finance commission, to consist of a state comptroller, a tax commissioner, and a revenue commissioner all three to be appointed by the governor, with the advice and consent of the senate, and to include also the existing

<sup>1</sup>For an account of subsequent events connected with budgetary procedure in New York, see MUNICIPAL RESEARCH, Nos. 72 and 86.



constitutional financial officers, the auditor and the treasurer. "This form of organization is proposed so as to embrace the constitutional officers in the general system; while by this method there is also given recognition to the opinion, held by some, that the final authority in such matters should not be entirely in the hands of appointive officers." (Report of the Efficiency and Economy Committee, p. 36.) This finance committee should exercise large powers in determining rules, regulations, forms, instructions and systems of accounts; in deciding appeals and reviewing original assessments. It assumes the powers of the several boards of tax levy and equalization which would under the proposal be abolished.

Each member of the commission, according to the report, should have a special field of work connected with finance. The state comptroller should be chairman of the commission and have charge of the preparation of the budget of revenues and expenditures for submission to the governor, with supervision of salaries and other expenditures, with the preparation and installation of accounts, and with inquiries in the business methods of state offices and institutions.

The tax commissioner should exercise supervision over local assessors and make original assessment of railway property, and the property of other public utilities, subject to review by the finance commission.

The revenue commissioner should have charge of the inheritance tax and the granting of automobile licenses.

The auditor of public accounts and the state treasurer should continue in the main their existing functions, the auditor because of his election would be able to exercise that independence of the departments whose accounts he audits, while the treasurer would remain a mere custodian of the funds of the state.

As has been mentioned above provision was made in the plan of state financial administration for a state budget by creating the office of comptroller whose duty should be the preparation of a state budget and the submission of the same to the governor.

As to the general need for a state budget formulated in a scientific manner the report states: "The State Constitution, in Article V, paragraph 7, provides that the Governor at the commencement of each regular session of the General Assembly shall 'present estimates of the amount of money required to be raised by taxation for all purposes.' So far as your Committee is aware,

no Governor has heretofore ever complied with this important constitutional duty. . . .

"In the opinion of the Committee, the constitutional provision referred to above contemplates that the Governor shall present to the General Assembly a detailed budget of appropriations recommended by him for the ensuing biennium, together with an estimate of the revenues of the state from sources other than direct taxation during the biennium, and a statement as to the amount to be met by taxation. The careful preparation of such a budget would be a potent factor in securing economy and efficiency throughout the executive departments. But to make this possible requires not only new methods of preparing and analyzing estimates, but also extensive reorganization and consolidation of the executive departments, so that the estimates from each group of related services may be based on adequate consideration by competent officials." (Report of the Efficiency and Economy Committee, Illinois, pp. 22-23, 1915.)

It was expressly stated that the budget contemplated by the committee in its recommendations would not be a mere statement of estimates but should include the complete plans of raising revenues to meet the proposed expenditures: "In the judgment of the Efficiency and Economy Committee, a satisfactory budget statement should include a classified analysis of revenues as well as proposed expenditures, which should be subjected to close scrutiny by competent and responsible officials charged with authority in the administration of the state finances, and submitted to the general assembly with the definite recommendations of the governor." (Report, p. 34.)

It was predicted by the committee that the careful compilation of the state budget by the comptroller and the subsequent assumption of responsibility by the governor would bring about a condition which would compel the legislature to hesitate before it increased the amounts requested.

#### *The Efficiency and Economy Commission of Minnesota*

The outstanding fact in the budgetary recommendations of the Minnesota commission is the proposed direct and intimate relation between the centralization of administration and the establishment of real budgetary procedure. The entire plan recommended by the commission rests upon the assumption that the state administrative machinery be centralized and made responsible. According to Dr. Durand, the plan of the commission

embodied little that is new but was largely based upon the recommendations of President Taft's efficiency and economy commission.

It was recommended that all funds expended be appropriated biennially by the legislature; the only exceptions being:

"The revenues of various land funds of the state, assigned to educational purposes;

"The revenues of trust funds and federal grants;

"The proceeds of mill taxes;

"The prison revolving fund." (Preliminary Report, p. 18.)

The practice of continuing revenues and of the use of fees or other revenues to cover expenditures for certain services were condemned.

Statements of estimates should contain very extended information for the use of the legislature. It was made clear that the exhibit of needs should be itemized more completely than the appropriation bill, should indicate how the money required was proposed to be divided among salaries, by grades, supplies of each kind, traveling expenses, permanent improvements and the like. The bill provided that the following information be included in every statement of estimates:

"Every estimate should show in parallel columns:

Name of item

Citation to statutes authorizing the service or fixing particular items

Appropriations for each year of the current biennium

The actual expenditures and anticipated expenditures during each year of the current biennium

Amounts needed for each year of the coming biennium

Explanations of increases or decreases

Estimated revenue or receipts in connection with each service.

It shall distinguish each line of work or activity and shall distinguish at least the following classes of expenditures: (1) Salaries; (2) Permanent improvements and equipment; (3) All other expenses." (Final Report, pp. 42-43.)

Estimates thus prepared should be submitted by the authorities in charge of each bureau or institution to the director of the department. The directors should then study carefully these estimates, confer with the subordinates immediately concerned in order more definitely to determine the relative urgency of the requested appropriations, and revise the estimates from the standpoint of general departmental needs.

The departmental estimates thus prepared should be submitted to the governor whose duties of investigation and revision should resemble those of the departmental chiefs. In this arrangement a revising agency was suggested to act in the interest

of the state administration at large, no other official except the governor presumably being able to view the budget as a whole in this general way. It should be remarked in passing that at this very point the relation of a centralized administration to a scientific budget is particularly emphasized. Only in a state administration federalized as the Minnesota commission proposed can a genuinely effective revision of estimates be made. To ask a governor to revise in detail requests from the scores of separate agencies found in most states is absurd. It would seem that only where the estimates from the minor agencies have been investigated by a responsible official in charge of a large field of administration and the divisions thus reduced to a minimum, can the governor make proper preparation of the budget for legislative consideration.

The revision of estimates by the governor should be undertaken, said the commission, with the expected revenues and the resulting tax levy in view. Estimated expenditures of the judiciary, the legislature and the militia should be included. The governor should add to the revised estimates a full statement of the expected revenues from all sources. When the preparation of the budget is complete, it shall forthwith be published "in form convenient for the legislature." The commission wisely suggested that a summary of the budget might be issued at the same time, a provision presumably made for the purpose of insuring very desirable publicity. To reassure those who feared that a budget system might diminish the just powers of the legislature, the statement was made that: "the preliminary study of the budget will relieve the legislature of much of the excessive burden of detail which now falls upon it, but will in no way lessen its control or its responsibility." (Preliminary Report, p. 19.)

No provision was made as to the method of presenting the budget to the legislature other than that it should be laid before each branch of the legislature on the first day of the session. There was no provision to bring the governor into personal touch with the legislature.

It was suggested by the commission that in case of the adoption of the plan of reorganization, committees of the legislature should be formed to exercise some control of measures affecting the departments proposed, as, a committee on welfare, a committee on education, etc. It was also suggested that the appropriations for each of the departments be considered by the appropriate department committee as well as by the finance committee but

that to expedite and simplify action the finance committee meet with each departmental committee in turn. It was further suggested that the finance committee be composed of members from each of the departmental committees.

The recommendations very clearly indicated that the estimates should contain a considerable amount of detail but that the same detail should not characterize the appropriation bill. The commission made some notable observations upon this subject: "Where every item is minutely fixed, unless there be provision for transfers by the executive from one item to another, the administration is not only unable to take care of unforeseen contingencies, but it is tempted to spend the whole of every separate item for the purpose specified, even though it may not actually be needed. Lump sum appropriations do not necessarily lessen the responsibility of the administration for expending money in accordance with the purposes intended by the legislature. The estimates on which the appropriations are based should, as already stated, present full details. The state officers should be required, in connection with the submission of their estimates to the next legislature thereafter, to state just how much was actually spent for each item specified in the preceding estimates. The legislature is thus in a position to criticise what has been done. Moreover, if it finds necessary, the legislature can fix items most minutely in the next appropriation bill.

"The appropriation bills should be itemized at least sufficiently to show a separate sum for each bureau of the several departments, each state institution, each new building or new public enterprise, and each improvement or purchase of permanent equipment of any importance. How much further the legislature shall go in specifying items is for it to determine; doubtless for some of the bureaus it would be well to make several sub-items." (Preliminary Report, p. 20.)

The commission evidently felt that it could not properly include in the final report, which was a proposed bill, anything with regard to the practices of the legislature, but in the preliminary report the legislature was urged to adopt customs and rules "which would make it somewhat more difficult for committees, or the legislative house as a whole to increase an item requested by the administration than to reduce it. It should be ordained by custom if not by law that no state officer or employe should try to get more for his branch of the service than is asked for by the executive. The fundamental idea of the budget system is

unity. It aims to avoid that pressure of separate officers and individuals for appropriations which has been so largely responsible for increasing the burdens of taxation." (*Ibid.*, p. 20.)

Perhaps the most noteworthy contribution made by the Minnesota commission in its recommendations concerning the budget is that which concerns the allotment of funds. The statement made in the preliminary report concerning this follows:

"If the policy of making appropriations in rather broad terms, by lump sums, should be adopted by the legislature, it would nevertheless be desirable that administrative officers should put some restraint upon themselves with reference to the amount to be spent for each specific purpose. If they fail to do this there is danger that too much may be spent in one direction, and that not enough will remain for the work covered by the appropriation as a whole. The Commission will accordingly recommend that each executive officer be required to make a formal detailed allotment of the funds available under each appropriation. This allotment, in case the total amount originally estimated had been appropriated by the legislature, would naturally be the same as the details of the estimates submitted. In case the total had been reduced, the allotment would have to represent reductions in some or all of the items. The allotments prepared by subordinate officers would require the approval of the governor, and would then be filed with the auditor and treasurer. Allotments thus made would be set up on the books of the auditor and treasurer, in the same manner as legislative appropriations, as credits to be drawn upon for the specified purposes. They could not be overdrawn by the mere process of requisition. If it should be found necessary to spend more for a given item than had been allotted, a formal order in writing would have to be made. This order, of course, would have to specify from what other item or items of the allotment the amount was to be transferred. This does not contemplate transfers from one appropriation of the legislature to another." (Preliminary Report, p. 21.)

The commission summarized its budgetary plan in the following expressive terms:

"The budget system proposed by the Commission thus provides for thorough study of the needs of the state as a whole, and of each branch of the state service, by the executive and by the legislature through committees organized systematically for that purpose. It provides the fullest possible information for the legislature as a basis for appropriations. It gives to the legislature absolute control over the broad purposes of expenditure; and while it leaves reasonable flexibility in the details, it makes the executive responsible to the legislature for the proper exercise of discretion with respect to those details. It would make the state's business a single unit." (Preliminary Report, p. 21.)

#### *The Legislative Investigating Committee of Alabama*

The first item contained in the report of the legislative investigating committee of Alabama concerned the method of making appropriations for the state government. After a recital of the faults and the shortcomings of the existing system a section of the constitution of the state was quoted which gives adequate sanction for legislation establishing a budget system. This constitutional sanction has never been carried out and the recommenda-

tions of the committee suggested giving vitality to it for the first time.

The committee recommended that the state budget be compiled and submitted to each session of the legislature by the governor and that it contain not only an estimate of what amounts may be necessary for the conduct of state affairs but a suggestion of methods for raising the revenue necessary to meet the outlay. A bill embodying the details was submitted with the report. (Report of the Legislative Investigating Committee, pp. 5-7.)

*Staff Report of the Survey Committee of State Affairs of Colorado*

The adoption of a budget system is the central need which, in the opinion of the staff of the survey committee of Colorado, must form the basis of a general reorganization of the entire state financial administration. In the recommendation of a budget system the report went farther than any of the other plans included in this chapter, chiefly because it included suggestions for constitutional change as well as legislative action.

In its financial procedure Colorado presents little variation from conditions which are common among the state governments and the findings and criticisms are not essentially different from those of other states. The following is a summary of the criticisms made concerning existing financial administration:

- (a) In compiling material for and framing the state's financial program the legislature is at each biennial session assuming a function for the performance of which it has neither the capacity nor the machinery
- (b) The various published reports issued by state authorities are of no value in presenting a comprehensive statement of the general financial condition of the state
- (c) The accounting system in use is inexact and unscientific and of little assistance in framing plans of raising revenue and making appropriations
- (d) There is no logical relation between the fiscal year as fixed by law and the time fixed for assessing, levying and collecting taxes
- (e) The existing system of providing revenues from different sources and applying the revenues for various purposes without first placing them in the general funds of the state results in confusion.

The recommendations concerning a budget may be summarized as follows:

(a) All estimates for expenditures, regardless of the sources from which the same may be financed together with the estimates of receipts of each, should be submitted by all state departments, boards and institutions to the budget and efficiency commissioner acting for the governor

(b) These estimates should be used by the governor in the preparation of the state budget

(c) In the preparation of the budget the governor should be assisted by a permanent budget and efficiency commissioner, with the necessary expert staff qualified and empowered to make investigations into the activities of the state with the object of securing necessary information for a revision of the estimates submitted

(d) The state auditor should establish a system of accounting and classification of expenditures in order to be in a position to furnish to the governor and the budget commissioner facts needed in preparing the budget

(e) The state auditor should moreover furnish to the governor statements of expenditures for the various activities of the state in the preceding appropriation period in order to furnish a basis for comparison; the auditor should also furnish an estimate of the state's revenue

(f) The time for submitting the budget to the legislature should be changed from "the commencement of each session" to the fifteenth of February (the legislature of Colorado convenes during the first week in January)

(g) The governor, and representatives of the executive departments, boards, commissions and offices designated by the governor to appear before the legislature, should have the right, and when requested by either house of the legislature, it should be their duty to appear and be heard in defense or explanation of any budget bill during the consideration thereof

(h) The legislature should be restricted to reducing any item in the governor's budget for the executive branch of the government and not be permitted to raise any of those items

(i) No special bill making an appropriation should be enacted unless special provision is made to raise the revenue therefor

(j) All appropriations recommended in the budget should be authorized by and included in one appropriation act.



Recommendations (a) to (e) might be put into effect by legislative act; recommendations (f) to (h) by constitutional amendment. This program provided for the most radical budgetary changes recommended in any of the efficiency and economy reports.

*The Efficiency and Economy Committee of Kansas*

As has been mentioned in a preceding chapter the recommendations of the efficiency and economy committee of Kansas concerning a state budget were formulated by Senator Joseph and included in the committee report. The section relating to a state budget recommended that the departments submit their estimates to the governor, following as closely as possible the form of the Wisconsin budget. These should be printed in one document. The governor "may or may not add his recommendations" to this compilation. This plan, says the report, "is taking no power from the legislature such as is done in many budgets."

This suggestion was submitted as a plan for the current session only. Senator Joseph added to his individual report a draft of a concurrent resolution "providing a state budget." This draft called for the submission of estimates by all department heads to the governor, public hearings conducted by the governor, revision of estimates by the governor, and the submission of the entire plan, together with estimates of revenues, to the legislature and administrative officials who should be heard personally. The final proposal was that the legislature should not alter the budget except to reduce or strike out items. This would bring, in fact, a self-imposed restriction upon the legislature. Whether Senator Joseph intended it to be merely the legislative registration of an intention not to increase items or whether it is an oversight which slipped into a rather hastily prepared draft is not apparent.

## CHAPTER V

### THE ADMINISTRATION OF PUBLIC SERVICE FUNCTIONS

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The most effective critics of state administration as it is now generally constituted have directed a large amount of attention to the heterogeneous group of agencies which perform the public service functions of the state.<sup>1</sup> Practically every legislative session has seen additions to the number of these agencies with a resultant increase in the complexity of organization and expense of operation. The pressure of this growing expense upon the revenues of the state constituted the chief reason for the formation of efficiency commissions and consequently the legislative acts which created most of them, vest them with the duty of investigating and recommending the improvement of the organization of these new branches of state government. Co-ordinating related functions, eliminating duplication of effort and centralization of the existing agencies are the chief means suggested to guide the recommendations of the surveys. (See the duties of the commissions as set forth in the creating acts and resolutions, Chapter 2.)

Accordingly the major part of the attention of practically all of the commissions under consideration was given to the work of simplification. With the exception of the New York department of efficiency and economy and the Wisconsin state board of public affairs every one of the commissions included in their reports a number of suggestions for the reorganization of the public service agencies. And the New York commissioner made such recommendations, after his office was abolished, to the state constitutional convention. In a few cases this constituted the entire body of recommendations while in three reports attempts were made to reorganize the entire field of administration.

The suggested changes usually take three forms: the combination of related functions, the substitution of single officials for commissions and boards and the increase in the governor's power of appointment. The third has been considered in another chapter.

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<sup>1</sup> For definition of the term "public service functions" see *MUNICIPAL RESEARCH*, No. 61, p. 89.

Most of the investigations were limited by the terms of the creative act, others by the amount of funds allotted and others by the time at the disposal of the members. Hence there is a wide variety in the recommendations made. In most cases this means that only a few sections of the field were covered. The general defects found in the administration of the public service functions are summarized in this chapter together with the recommendations of those commissions which covered only a part of the civil administration.

**DEFECTS IN THE ORGANIZATION OF THE PUBLIC SERVICE FUNCTIONS POINTED OUT BY THE EFFICIENCY AND ECONOMY COMMISSIONS**

The more recently developed part of state administrative machinery seems to be that at which most criticism has been leveled in all the recent taking of stock which the states have been doing.<sup>1</sup>

Governors' messages, department reports, legislative investigations, and political writers have thoroughly agreed that, in the multiplicity of diversified forms which the public service agencies have assumed, all responsibility has been lost while waste and inefficiency have been everywhere present. The commissions under consideration have but reinforced the opinion now generally held. Yet it may be profitable to enumerate briefly the criticisms which in many cases were preliminary to recommendations for improvement.

The more common defects in the public service administration of the states investigated may roughly be grouped as follows:

1. Multiplicity of administrative agencies, with a corresponding lack of correlation,
2. Diversity of form,
3. Predominance of the board type,
4. Ineffective supervision,
5. Lack of responsibility either to the governor or the electorate.

**1. Multiplicity of Administrative Agencies**

A great number of offices, departments, bureaus, boards and commissions have accumulated in most states. As new functions

<sup>1</sup> See especially the governors' messages to the 1917 sessions of the legislatures; perhaps the most forceful of which is that of Governor Capper of Kansas. An article summarizing the more important points made in the messages appeared in the *New Republic*, March 3, 1917.

have been assumed, new agencies have been created by legislative action with little or no thought about their proper place in the administration. In most cases each has been created with small consideration for the proper apportionment of functions among agencies already existing. The result has been overlapping of functions, duplication of effort, and lack of any effective supervision. In Illinois there were at the time of the investigation more than one hundred state offices, boards and commissions for administrative work provided by statute. "There are separate boards for each of the state penitentiaries and reformatories and for each of the state normal schools. There are a half a dozen boards dealing with agricultural agencies and about a score of separate labor agencies including four boards dealing with mining problems and eight free employment offices, each substantially independent of each other." (Preliminary Report, p. 10.)

The New Jersey report points out a common method of creating departments which has contributed to the existing confusion. "In 1907 the state organized a department of inland waterways. Such department is charged with the specific duty of constructing and maintaining such additional waterways as might be authorized by subsequent appropriation. When in 1911 the legislature concluded that it would be wise to study the possibility of a ship canal, such study was referred, not to the department already existing, but to a new commission known as the New Jersey Ship Canal Commission, which in turn, organized a department of its own. Every new project has resulted in a new commission so that we now have two Washington Commissions—one a Washington Crossing Commission, and the other a Washington Rock Commission." (Second Report of the Economy and Efficiency Commission, p. 13.)

In Minnesota there were between sixty and seventy administrative divisions, most of them entirely independent of one another. Their lack of co-ordination is shown by an incident which found its way into the preliminary report of the efficiency and economy commission. "Recently the state fire marshal received from a hotel man in southern Minnesota a letter something like this: 'Dear Sir: The hotel inspector has ordered me to put in a new floor. One of your deputies has instructed me to tear down the building. Which shall I do first?'"

In Iowa there were fifty-seven executive agencies (Report of Commission on Retrenchment and Reform, pp. 10-12); in

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Massachusetts, 108, in charge of 526 officials of whom 374 are appointed by the governor and his council. (Report of Committee on Efficiency and Economy, on Functions, Organization and Administration of the State Government.) The study of the government of New York issued by the department of efficiency and economy points out that "the government of the state of New York comprehends one hundred and sixty-nine departments, bureaus, boards, institutions, commissions and offices and that they supervise or regulate practically everything there is in the state. Many of these one hundred and sixty-nine agencies have been created since . . . 1894" (p. vii).

**8. Diversity of Form**

No less marked than the number of separate agencies among which the administrative functions of the state are proportioned is the wide diversity in form of organization and in the number of officials at the head of each. This number in no case bears a logical relation to the nature of the functions performed. A brief tabulation shows the variety existing in the states of Illinois, Massachusetts, and Minnesota. The agencies included are in nearly ever case responsible to the governor.

	SINGLE HEAD	BOARD OR COMMISSION	SOCIETY OR ASSOCIATION
Illinois . . . . .	17	46	9
Massachusetts . . . . .	29	52	7
Minnesota . . . . .	20	88	0

The Massachusetts commission on economy and efficiency said of the diversity of form of organization in that state:— "One institution is controlled and directed by the unpaid state board of charities, while three groups (comprising nine separate institutions) and two single institutions are each controlled and directed by boards [sic] of unpaid trustees, under the supervision of the board of charities. Institutions for mental defectives are controlled in many important respects by the paid state board of insanity, but with some elements of control, still vested in separate unpaid boards of trustees for each institution. Penal institutions are under the control of an unpaid central board with a paid chairman who acts as executive officer. The normal

schools are controlled by an unpaid central board with a paid executive officer who is not a member of that board. Thus four different forms of departmental organizations administer the public institutions of the commonwealth." (Report on Functions, Organization and Administration, p. 37.) It was further shown that thirteen different administrative departments have control over construction and building for public purposes.

The situation in Illinois was practically the same. "Less than a third of such administrative authority now in existence was established before 1870; more than a third of such number has been created in fourteen years from 1899 to 1913; and every session of the legislature sees the origin of several new authorities. New boards and offices have usually been created with little reference to previously existing authorities, either as to the forms of the organization or the scope of their powers; and most of them are substantially independent of each other, except for the nominal supervision of the governor, through his powers of appointment and removal." (Preliminary Report, pp. 8-9.)

### 3. The Predominance of the Board System

It will be seen that in the three states considered above the board system of administration predominates. The Minnesota commission on efficiency and economy seems to voice a common conclusion when it says, "In the third place, a study of the chart will show that most of the important executive work of the state at present is in the hands of the board—paid, *ex officio*, or unpaid. Students in political science are all agreed that executive work should be done by individuals and not by boards. The average citizen has come to the same conclusion. The board system tends to delay efficiency. It dissipates responsibility. No one knows exactly who to blame if work is done badly. Boards are necessary for sub-legislative and judicial work; they are useful to give advice, they are not suited to administrative tasks. Moreover, under the board system the governor has little control over the administration. The board members usually have overlapping terms. Each governor appoints only a minority. Each board is a government in itself." (Preliminary Report, p. 10.)

A further feature of board control is the so-called "*ex officio*" board. Except for a very few purposes there is no logical need for the presence of an elective officer upon an administrative board. The governor, secretary of state, auditors and attorney-

general are often members of a great number of boards. This, as pointed out, puts upon these officers duties wholly foreign to their real functions, and membership on such boards becomes burdensome in the extreme. In Minnesota the governor is a member of so many boards that as the commission states he can "hardly keep count of them."

#### *4. Ineffective Supervision*

The comment of the Illinois committee on the character of state administration expressed views applicable to all the states where investigations were made. "As a result of the absence of any systematic organization of related services there is no effective supervision and control over the various state officers, boards and commissions. It is true that the greater number of these are under the nominal supervision of the governor through his power of appointment and removal. But the very number of separate offices makes impossible the exercise of any adequate control. To a very large extent each authority is left to determine its own actions; conflict of authority between two or more offices is often possible; and if harmony and co-operation are secured, it is by voluntary compromise rather than by the advice or decision of a superior authority. . . . At the same time the number of matters necessarily brought to the attention of the governor—owing to the absence of intermediate supervising officers—has burdened him with such a mass of details that he has been unable to exercise adequate supervision over such matters, while the very volume of such business brought to his attention takes time from more important questions of general policy. Moreover a number of important departments and services are not even under this limited supervision of the governor. This is true of the offices provided for by the constitution; and also of the number of boards chosen by election or by other methods, as the state board of equalization, the trustees of the University of Illinois, and the State Board of Agriculture. In the case of the constitutional offices this lack of control extends not only to their primary functions, but also to other unrelated powers and duties imposed on them by statute." (Final Report, pp. 21, 22.)

#### *5. Lack of Responsibility*

The logical result of the foregoing defects is utter lack of responsibility. This need seemed in practically every case to be definitely before the investigators. Their proposals for a budget consolidation of agencies, increasing in some cases and making

more direct in others the appointing power of the governor were reforms intended to make the responsibility of the governor for the conduct of administration more direct. "The popular conception of the governor's responsibility, in the opinion of the committee, is based on a sound and just principle; the machinery of state administration should be so organized as to enable this conception to be adequately realized." (Final Report, Illinois Efficiency and Economy Committee, p. 24.)

THE ECONOMY AND EFFICIENCY COMMISSION OF NEW JERSEY

The New Jersey commission was created to consider and recommend plans for the reorganization and consolidation of different departments of the state government whose duties are intimately related. Its study was therefore chiefly directed toward the public service agencies of the state. Limitations of time and funds prevented the commission during its life from covering all of the public service functions of the state, but its recommendations nevertheless dealt with a very large part of them. Most of these findings are included in the second annual report.

The work was somewhat intensive. A study of the internal workings of each department and division in a particular field of administration was made, its functions and composition considered, and finally the department was viewed in its relations to other departments of the similar or closely related functions with the view of consolidating all such agencies.

Unlike most of the other studies, the one made by the New Jersey commission was carried out in the light of a single, well defined policy. This was expressed in the second report in the following words:

"We, therefore, find that all modern enterprises are conducted by corporations . . . guided by a board of directors; in fact, the law in this state—as in others—provides that the business of any corporation shall be managed by its directors, and that each shall have a chief executive officer called its president . . . it has, therefore, been our aim to group together commissions and officials engaged in the same kind of work, and to consolidate such work in one department, with a board of directors, and a chief, corresponding to the president of the corporation. The powers of the consolidated departments we believe should be conferred upon the board of directors, so that it may define the policy to be pursued by the department, and enact rules and regulations to be observed by the chief and all employees. . . . We believe that the best class of men will be secured to act on such boards if no salary is paid, and if they are allowed only their necessary expenses. We have seriously considered the advisability of paying some small salary, but experience shows that for every salary offered there are numerous office seekers, the majority of whom scarcely measure up to the salaries to be paid. We believe that there are many public-spirited men in the state who cannot be induced to



enter the employ of the state on salary basis, but who would cheerfully give their services if they are afforded a fair opportunity to have some voice in shaping the policies of the state and improving general conditions" (Pp. 16-17).

The single department executive should, in the opinion of the commission, be trained in the public service and selected for that reason rather than on account of his prominence in public life. His duty should be the enforcement of all laws concerning his department and all rules formulated by his board. No inference is drawn that the executive should necessarily be a citizen of the state. With the consolidation of related departments and the entire field of administration divided into well defined parts, the legislature in creating new agencies should preserve the organisation units already in existence and place each new agency in the appropriate department.

In summarizing the recommendations made by the commission they will be considered under the heads of the new departments proposed.

#### *The Department of Health*

The existing administration of the health laws was vested in a state board of health composed of five members appointed for six years and paid an annual salary of \$1,500. The work was divided into five divisions, each of which was under the supervision of one of the board members. The actual administration of each division was in charge of an expert assistant. The most unsatisfactory feature of the health administration according to the commission was the fact that local boards, numbering nearly five hundred, were, in a large number of instances, inefficient and inactive but entirely independent of the state board.

The commission recommended that a department of health supplant the existing health board. This department should be controlled by a board of six appointed by the governor for six years. This board should determine policies and enact rules and regulations. Two of the six should be physicians, one a veterinarian, and one a sanitary engineer. The board members should receive no compensation. The executive head of the department should be a commissioner appointed by the governor for a term of five years at an annual salary of \$6,000. The commissioner should be *ex officio* chairman of the board. It should be noted that the analogy to the organization of a corporation has not been carried out in this plan.

An existing commission on tuberculosis in animals should be abolished and its duties taken over by the department of health.

To compel the local health authorities to enforce the law the recommendation was made that the state board be given power in cases where the local authorities fail to enforce the law to notify them to do so, and in case such notification be disregarded, to perform the omitted act and assess a fine to be paid by the local board.

#### *The Department of Shell Fisheries*

The administration of state laws concerned with the regulation of the shell-fish industry was in the existing system vested in four commissions and one bureau. These agencies included a total of eleven commissioners and five executive officers, all receiving salaries from the state, and all except one of the executive officers were appointed by the governor. These commissions performed similar functions in different sections of the state. Each was independent of the other and no means of co-operation existed among them. In addition to these agencies there was a division called the bureau of shell fisheries, the duty of which was collection of statistics of the oyster industry. This bureau was in charge of a chief appointed by the governor.

The commission recommended that instead of the existing officials and departments, there should be one department in charge of the shell-fish industry of the state,—this department to be under the control of a chief commissioner appointed by the governor by and with the advice and consent of the senate for a term of three years, paid \$2,500 per year and devoting all of his time to the duties of the office. He should be charged with the enforcement of all laws relating to the department, and with all rules and regulations enacted by the board. He should serve as the appointing officer of the department, and enjoy large powers of supervision over all employes.

The semi-legislative functions of the department should be vested in a board composed of six citizens of the state, actually engaged in shell-fish industry as planters or shippers, or as owners or lessees of land in which shell fish are produced.

#### *The Department of Taxation*

As stated in a preceding chapter, the commission recommended the consolidation of the state board of assessors and the state board of equalization into a new board of taxation composed of five members appointed by the governor for five years.

*The Department of Conservation and Development*

When the investigation was made the state was maintaining the following commissions engaged in the work of conservation:

- State Water Supply Commission
- Forest Park Reservation Commission
- Board of Riparian Commissioners
- State Geological Survey
- Washington Crossing Park Commission
- Washington Rock Park Commission

The total membership of these commissions was 42. Their duties may be inferred from the titles.

The commission recommended that all of these commissions be abolished and their duties vested in a new department of conservation and development,—the authority of the department to be exercised by a board of eight members appointed by the governor. In addition the suggestion was made that the state architect be transferred to this department from the department of charities and correction. The executive officer of the department should be a commissioner appointed by the governor with the consent of the senate for a term of five years.

*The Department of Commerce and Navigation*

The functions of the state relative to commerce and navigation engaged the attention of a number of separate departments. These were the department of inland waterways, the New Jersey ship canal commission, and six commissioners of pilotage. No connection existed between any of these agencies although the functions performed by them were more or less related.

The commission recommended that all of their functions be vested in a new single department of commerce and navigation. A board of six members appointed by the governor should be the governing authority, make rules and regulations and determine policies. The executive should be a commissioner appointed by the governor for three years at a salary of \$3,000.

*The Department of Prison Control*

The agencies concerned in the management of the state prison were the following:

- Supervisor of the state prison
- Six inspectors of the state prison
- Keeper of the state prison
- Prison labor commission
- Prison board of parole.

As might be inferred, this cumbersome mass of administrative machinery gathered about the state prison introduced serious difficulty in its management. Immediate relief was believed by the commission to be imperative, both in general administration and in the management of the prison itself. A mode of organization similar to that recommended for the other departments was suggested; "an unpaid board with power to guide, direct and legislate for the prison." (*Ibid.*, p. 91.)

The necessary executive for this department already existed in the office of warden, who should be retained. He should be charged not only with the safe keeping of the prisoners, but with the enforcement of all laws relating to the prison and all rules and regulations made by the board. He should moreover have all power to employ help subject to the power of the board to fix salaries.

#### *Department of Labor*

Two divisions of the New Jersey government were charged with duties relative to labor, namely, the department of labor and the bureau of industrial statistics. It was recommended in a supplemental report that the bureau of industrial statistics be placed under the control of the department of labor.

#### *The Department of Agriculture*

In the report of 1914 it was stated that an investigation of the existing agricultural agencies was to be a future task of the commission. In the report of January, 1916, it was added that such an investigation had not been completed, but was under way. The fact was set forth, however, that the state board of agriculture with headquarters at Trenton, the state agricultural experiment station, at New Brunswick, and the state agricultural college were performing functions closely allied, but with no means for co-operation. It was, therefore, recommended that there be created a state board of agriculture to supervise all agencies dealing with the advancement and enlargement of the agricultural agencies of New Jersey. As the investigation was not completed, no final conclusions were expressed.

PUBLIC SERVICE FUNCTIONS

A SUMMARY OF THE RECOMMENDATIONS OF THE NEW JERSEY COMMISSION

EXISTING DEPARTMENTS, COMMISSIONS, BOARDS, AND BUREAU INVESTIGATED BY THE COMMISSION	PROPOSED NEW DEPARTMENTS	ADMINISTRATIVE OFFICIALS IN CHARGE OF PROPOSED DEPARTMENTS	SALARY	TERM OF YEARS
State Board of Health Commission on Tuberculosis in Animals	Department of Health	Board of 6 Commissioner	Unpaid \$6,000	6 5
Bureau of Shell Fisheries New Jersey State Oyster Commission Ocean County Oyster Commission Atlantic County Oyster Commission Shark River Oyster and Clam Com.	Department of Shell Fisheries	Board of 6 Chief Commissioner	Unpaid \$2,500	3 3
State Board of Assessors State Board of Equalization	Department of Taxation	Board of 5	\$3,500	5
State Water Supply Commission Forest Park Reservation Commission State Riparian Commission State Geological Survey (Single Head) Washington Crossing Park Commission State Architect's Bureau	Department of Conservation and Development	Board of 8 Commissioner	Unpaid \$6,000	* 5
Department of Inland Waterways New Jersey Ship Canal Commission Commission to Investigate Port Conditions Obstruction to Navigation Ina. Inspectors of Power Vessels	Department of Commerce and Navigation	Board of 6 Commissioner	Unpaid \$3,000	6 5
New Jersey State Prison Keeper Board of Prison Inspectors Prison Labor Commission Prison Board of Parole	Department of Prison Control	Board of State Prison (Const. officer)	Unpaid *	* *
Department of Labor Bureau of Industrial Statistics	Department of Labor and Industry	*	*	*
State Board of Agriculture Agricultural Experiment Station Rutgers Agricultural College	Department of Agriculture	*	*	*

\*No recommendation.

THE ECONOMY AND EFFICIENCY COMMISSION OF MASSACHUSETTS

With the exception of the report on the reorganization of state institutions and the organization and functions of the state government and the 1916 report on the budget, the economy and efficiency commission of Massachusetts made few recommendations of changes in the administrative structure of the government. Its annual reports consisted mainly of compilations of short documents submitted from time to time to the general court.

With a few exceptions the recommendations made involved procedural rather than organic changes. These exceptions are summarised below.

*An Elections Court*

The state ballot laws commissions throughout the state should be transferred to the state ballot law commission which was to be known as the elections court of the commonwealth. No change in the constitution or the personnel of this commission was recommended.

*A Labor and Industrial Board*

It was recommended that the industrial accident board be consolidated with the state board of labor and industry, and the name changed to the Massachusetts labor and industrial board.

*A Commissioner of Fisheries and Game*

It was suggested that the commissioners of fisheries and game be replaced by a commissioner of fisheries and game.

*Administration of the State Militia*

It was recommended that the business administration of the state militia be centralized in one office. This would consolidate the offices of the adjutant general, quartermaster general, the surgeon general, and the armory commission.

*State Normal School*

A lengthy survey of the state normal school was made with several recommendations for administrative reorganization. The latter included, in part, a centralized system of accounting for all normal schools, the establishment of the office of treasurer of the state board of education, a definition of powers and duties for such an agent, and the centralization exclusively within the office of the business agent of the board of all business activity relating to normal schools.

*A Central Administrative Department of the State Boards of Registration*

After an examination of various boards of registration the commission recommended the establishment of a central administrative department of the boards of registration in dentistry, embalming, medicine, nursing, optometry, pharmacy, and veterinary medicine, where all of the work of such boards should be transacted except the actual giving of examinations.

**THE ECONOMY AND EFFICIENCY COMMISSION OF PENNSYLVANIA**

In considering the work of the Pennsylvania commission it should be remembered that the existing administrative structure

of Pennsylvania is not so complicated and unsatisfactory as that of most of the other states. Hence the need for general reorganization was not in the opinion of the commission so urgent. Many of the public service functional groups as for example, highways and health, are already centralized in single departments. The work of the commission was confined to a number of places which seemed to be in particular need of improvement and most of its recommendations relative to the public service functions of the government would involve no marked change in the structure of the administration. In fact a large part of them would concern only internal operations of a minor nature.

The recommendations which affect the public service functions of the administration are summarized below.

#### *A State Board of Examiners*

In common with most states Pennsylvania has a multiplicity of boards whose functions are the examination of applicants for permission to practice a number of professions. All of these examinations should, in the opinion of the commission, be conducted by one state board of examiners. The recommendation was made that this board be created by the governor and the state board of education to supplant and to assume the duties of the following agencies now existing:

- Board for the examination of accountants
- Board of examiners for registration of nurses
- The dental examining board
- The pharmaceutical examining board
- The state board of veterinary medical examiners
- The state osteopathic examining board
- The state board of undertakers.

This state board should in the opinion of the commission conduct all examinations for state positions required by the state civil service law.

As a part of this plan there should be an advisory board with representatives in its membership of each profession concerned.

#### *The Department of Public Instruction*

A standardization of salaries in the department of public instruction was recommended: the work to be conducted by the state board of education.

*A Publicity Bureau*

The creation of a new bureau of publicity was recommended "to keep continually before the public what Pennsylvania is accomplishing, not only in her official public capacity, but also in the private fields of commercial and industrial activity." No suggestion appears in the report as to how such a bureau should be composed and how its mission should be carried out.

*The Department of Health*

The commission approved the existing organization of the state health department. The only recommendations made were that the health officer of the port of Philadelphia, and the state quarantine board, an independent body, be placed under the supervision of the department of health.

In addition to these suggestions the commission condemned dual office holding and recommended its abolition.

THE COMMISSION ON THE CONSOLIDATION OF STATE COMMISSIONS  
OF CONNECTICUT

The haste with which the work of this commission was performed made a careful study of administrative methods impossible. A number of the public service agencies were touched upon and several important changes recommended. The attention of the commission was directed mainly to the following boards and commissions:

- Agricultural Boards and Commissions
- Industrial Boards and Commissions
- State Boards of Examiners
- The Department of Public Health
- State Board of Charities
- State Police
- Shell Fish Commissioners.

The last three of the above received only brief mention in the report of the commission. Concisely stated, the recommendations concerning them are as follows:

The advantage of placing the existing county children's homes under the state board of charities should be made the subject of a special inquiry

The police powers of the shell-fish commissioners should be transferred to the state police commission

The existing shell-fish commissioners should be supplanted by another board of three members appointed by the



superior court for terms of three years, the appointees to have certain technical qualifications.

The other agencies and functional groups received a more detailed consideration.

*Agricultural Boards and Commissions*

The state agencies considered by the commission in their investigation of the administration of the functions of the state concerned with agriculture were:

State Board of Agriculture  
Connecticut Agricultural College  
Storrs Experiment Station  
Connecticut Agricultural Experiment Station  
Dairy and Food Commissioner  
Commissioner of Domestic Animals.

The first mentioned was a body of fourteen members including the governor, *ex officio*, eight chosen by county caucuses and five chosen from the congressional districts of the state by the governor. In the opinion of the commission its powers were wholly inadequate and its membership so large as to be unwieldy and inefficient. The other agencies mentioned above were selected in various ways. Their responsibility was so scattered and their activities so lacking in co-operation that in the opinion of the commission the entire field of state agricultural work demanded reorganization.

The commission accordingly submitted bills embodying a scheme of reorganization substantially as follows:

A new state board of agriculture composed of the governor, the president of the Connecticut Agricultural College, and the director of the Connecticut agricultural experiment station, *ex officio*, and four members appointed for four years by the governor upon the nomination of four societies of the state (the pomological society, the dairymen's association, the poultry association and the New England tobacco growers' association). This body should assume all of the duties and powers of the dairy and food commissioner and the commissioner on domestic animals. The executive officer of the board should be a commissioner of agriculture chosen by the board. The members of the board should receive no compensation.

It was further provided that this board if created should make a study of the two experiment stations and the college above

mentioned and report to the assembly upon a reorganization of each of them and a redistribution of their appropriations.

*Industrial and Labor Boards and Commissions*

The agencies considered under this head were the bureau of labor statistics, the factory inspector and the board of mediation and arbitration. The first named was in charge of a commissioner and its duties included the collection of labor statistics, the management of the free state employment bureaus, and the licensing of private employment agencies. The factory inspector was charged with looking after the safety of employes in factories and other places where machinery is used, with the inspection of bakeshops and places for the preparation of foods, and with the duty of reporting on accidents arising under the workmen's compensation act. The state board of mediation and arbitration, according to the commission, had been inactive for some years.

The reorganization suggested involved the abolition of the three agencies mentioned and the formation of a new state department of labor and industry under a board of labor and industry of five members. Four of these were to be appointed by the governor with the consent of the senate while the chairman of the existing workmen's compensation commission would be the fifth member. This new department should have all of the powers and duties of the agencies supplanted. The executive work of the department should be done by a single commissioner appointed by the board and subject to its direction.

*State Boards of Examiners*

The commission described the confusion of policy surrounding the admission of candidates to various professions and threw light upon a condition which undoubtedly obtains in many other states. In the state of Connecticut when the investigation was made, there were thirteen examining boards. There were separate commissions for the examination of osteopaths, dentists, veterinarians, midwives, barbers, embalmers, nurses, pharmacists, opticians, and accountants; while the regular, homeopathic and eclectic physicians each had an examining board of its own. Eight of these boards were made up of five members each while five boards had three. The members of five boards served for five years, of one board for four, five for three and two for two. Seven boards were appointed by the governor, four by the state board of health on the nomination of medical societies, and two

under miscellaneous provisions. No general rule as to remuneration could be found; the more general practice being to divide the fees among the board giving the examination. The fees varied from one to twenty-five dollars.

Into this confusion the commission did not even attempt to introduce order. However, a number of recommendations were made which, if adopted, might introduce a measure of improvement. The abolition of the three boards for the examination of physicians was suggested, with provision for the creation of a single one to consist of representatives of the three branches of the profession. Other recommendations touching the administration of the examining function were:

A more regular accounting to the state comptroller of the receipts and expenditures

The appointment of all necessary inspectors by the state board of health instead of by the particular examining board concerned

The approval by the state board of health of all rules and regulations of the examining boards

The standardizing of regulations regarding the revocation of licenses.

No change in the method of appointment, the membership or terms of office were suggested.

#### *The Department of Public Health*

The chief faults which the commission found in the administration of the public health laws were:

Lack of power in the state board of health

The inefficient administration of the local health regulations, the same being under the control of county health officers who were in most cases lawyers appointed by the judges of the superior court

The lack of inspectors and trained workers in the local districts.

The recommendation of the commission in this connection was the appointment by the state board of health of inspectors at large with powers to go into localities where the local health authorities have refused to act and investigate, advise and if necessary to act through legal means to remedy bad conditions.

The investigation of the public health laws which was one of two functions imposed by law upon the commission was not attempted.

THE SURVEY COMMITTEE OF STATE AFFAIRS OF COLORADO

The staff report of the Colorado committee indicates that a very considerable part of the field of public service administration was carefully considered. A large number of recommendations were included having as their object the consolidation of related agencies and the elimination of useless ones. Owing to the limited amount of time at the disposal of the committee, a complete plan for the reorganization of the administration was not recommended. It is noteworthy that in addition to recommendations for changes in administration a number of changes in the substantive law were proposed, such as new statutes for the protection of labor and the regulation of industry. The chief administrative changes recommended were in the following fields:

- The Regulation and Supervision of Labor
- The Public Control of Corporations
- Public Works
- The Protection of Game and Fish
- Care of Dependents, Delinquents and Defectives.

In addition, changes were suggested which concerned the following agencies:

- State Inspector of Oils
- State Board of Land Commissioners.

It should be remembered that in addition to the recommendations summarized in the pages following, the committee should be credited with the intensive studies in special fields of administration named in Chapter II. These studies themselves constitute no slight contribution to the literature of state administration but on account of their detailed and specialized character they cannot be treated in this essay except in so far as they call for changes in the administrative organization of the state.

*The Regulation and Supervision of Labor*

The organizations for the administration of the related functions involving labor in Colorado illustrate so well the confusion of responsibility characteristic of state government that they deserve special attention. The secretary of state is labor commissioner *ex officio*. Under his supervision is a deputy labor commissioner who has control of a bureau of labor statistics, a department of factory inspection, the free employment offices

of the state and the supervision of private employment agencies. In addition there are the following agencies:

Appointed by the governor with the advice and consent of the senate—

Industrial commission

Commissioner of mines

Boiler inspector, and his two deputies

Appointed by the governor from a list of eligibles—

Chief coal mine inspector.

The coal mine inspection department is financed by a tax on each ton of coal mined; the supervisor of private employment agencies by private fees, while the other agencies are provided for in the biennial appropriations.

The complete centralization of the functions performed by these agencies under the existing agencies is proposed by the report. Three of them, the bureau of mines, the coal mine inspection department and the factory inspection department, should retain their present organization but be subject to the industrial commission. The functions of the bureau of labor statistics and the boiler inspector should be absorbed by the existing organization of the industrial commission. The payment of all fees and other revenues into the general funds of the state and the direct support of the industrial commission by appropriations was another recommendation.

#### *The Public Control of Corporations*

The staff report recommended the complete centralization of all agencies concerned with the public control of corporations under the existing public utilities commission. This means the functions performed by the following administrative units:

Public Utilities Commission

Commissioner of Banking

Department of Insurance

Bureau of Building and Loan Association

(Now under the auditor of state)

General Corporation Licensing and Control

(Functions now exercised by the secretary of state)

Commission Merchant Inspectors

(Now under the secretary of state)

Ore Buyers' Inspector

(Now under the secretary of state).

The administrative heads in immediate charge of all of the functions of this department should be under the civil service law with all other employes of the commission, according to the report. In addition to these changes involving administrative reorganization, a number of changes in the law and practice of controlling corporations were proposed.

*Public Works*

The agencies included under this head by the survey staff are:

- State Highway Commissioner
- State Highway Commission (advisory board)
- State Engineer
- Board of Capitol Managers
- State Forester.

The administration of state highways was made the subject of a special investigation by Mr. A. N. Johnson of Chicago, a consulting engineer. At the time the summary report was compiled, Mr. Johnson's study was not completed, so the first two of the above agencies were not covered in the recommendations. Likewise the office of state engineer was not considered although the laws concerning it were collected and digested for the purpose of future investigations. No inquiry was made into the office of state forester, now under the department of agriculture, but it was mentioned in this connection by way of calling attention to the fact that such a functionary should be included in the department of public works.

The board of capitol managers was made the object of a searching and critical investigation. It was shown by the staff that the management of the state capitol building and museum had been grossly inefficient and wasteful. The recommendation was made that this board be abolished and a new board of public works created, with a division of public buildings to have immediate charge of the capitol buildings and grounds; and that in case such a department be established, the office of state highway commission should form another subdivision. In case such a department should not be established, the report specified definite reforms in the existing functioning of the board of capitol managers which should be adopted in the interests of efficiency and economy.

*The Protection of Game and Fish*

A survey of the state game and fish department was made and a number of recommendations formulated concerning the in-

ternal administration of the same. The suggestion advanced was that this department be merged with the department of agriculture, the board of stock inspection commissioners, and the state racing commission—the functions of all four to be administered by a single department. The staff was unable to make a detailed investigation of the divisions mentioned and did not suggest a method of organizing the proposed department.

*The Care of Dependents, Delinquents and Defectives*

The question of centralizing the control of all agencies which might be grouped under this head was not considered in the report. It was stated, however, that the expected report which was undertaken at the request of the committee by the United States Public Health Service and by the national committee for mental hygiene may take up the question of consolidation.

*State Inspector of Oils*

A study was made of the office of state inspector of oils. It was recommended that the duties of this official be extended to include the standardisation of weights and measures and that in addition he should include more research work and engage in greater activity in his inspection work.

*The State Board of Land Commissioners*

The investigation of this agency did not reveal the necessity of a change in the existing administrative machinery although a number of changes in the details of the department were proposed.

*Miscellaneous Investigations of Public Service Administration*

In addition to those mentioned above, a number of surveys were made without any attempt to recommend changes, the work done usually including only the compilation and digesting of legislation concerning certain offices:

- Partial study of state printing laws and procedure,
- Digest of the duties of the state board of immigration,
- Survey of the state board of health undertaken by the surgeon general's department of Washington. Not completed when the summary was made.
- Survey of the common school system of the state, of which the report had not been received by the committee when the summary was made.

THE EFFICIENCY AND ECONOMY COMMITTEE OF KANSAS

The recommendations made by the Kansas committee which concern the organization of the public service functions of the administration were set forth very briefly in the partial report issued. The recommendations made may be summarized as follows:

1. The substitution of one tax commissioner for the existing tax commission of three members.
2. A commissioner of educational institutions instead of the existing board of administration.
3. The consolidation of the work of the penal board and the board of control in charge of penal and charitable institutions in a new department in charge of a single commissioner.
4. The formation of a board of administration made up of the governor, the three commissioners above mentioned, and the state accountant, the duties of this commission to consist of "checking over of important matters dealing with institutions." (Partial Report, p. 6.)
5. The consolidation of "the State Board of Agriculture, the departments of Horticulture, Live Stock, Grain Inspection, Entomology, Dairy, Forestry, Stallion Registration, Feeding-stuffs, Irrigation, Highway Engineer, Veterinary, Fish and Game, Geology, and all other departments existing or contemplated which would rightly come under this head" (*Ibid.*, p. 8) into one department in charge of a single commissioner.
6. A number of changes in the educational administration of the state, including the abolition of two small institutes for colored students, a school of mines at Wier, the schools of journalism and the academy at the agricultural college, the restriction of the normal school courses to two years, and the discontinuance of the last two years of instruction at the state medical school at Rosedale.



CHAPTER VI  
THE ADMINISTRATION OF PUBLIC SERVICE  
FUNCTIONS (*Continued*)

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The commissions appointed in Iowa, Minnesota and Illinois proposed complete plans for the reorganization of the state administration. The general plan adopted in all three was the same; the consolidation of all administrative agencies not protected by the constitution into a few great departments with subordinate divisions in each performing related functions. This was deemed by the commissions to be the plan of organization commended by the experience of the federal government and of modern business corporations.

While the general principle of concentrated authority was accepted in each case the grouping differed in the plans proposed. The Iowa plan provided for only three departments, Minnesota five, while ten were proposed for Illinois.

THE COMMITTEE ON RETRENCHMENT AND REFORM OF IOWA

*Report of the Efficiency Engineers*

In accordance with the provisions of the act creating the Iowa Joint Committee on Retrenchment and Reform the firm of Quail, Parker & Company, efficiency engineers, was employed to make a study of "the existing procedures incident to the transaction of the business of the State in the various offices and departments located at the seat of government in the City of Des Moines; and to make recommendations with a view to the betterment thereof." (Manuscript Report of the Efficiency Engineers, p. IV.) The report of this firm was submitted to the committee in December, 1913, a year before the final report of the committee was completed.<sup>1</sup>

This report is marked by an attempt at a general reorganization of the executive functions of the state government. The reorganization proposed would not, according to the statement of the engineers, make necessary a change in the constitution of

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<sup>1</sup>The report of the engineers was submitted in typewritten form and has not been published. A summary of its findings and recommendations is contained in the monograph already referred to "Reorganization of State Government in Iowa." Professor Horack's chapter dealing with this report can also be found in the *American Political Science Review*, LX, p. 258.

the state, but could be brought about by legislative action. This plan of reorganization according to Professor Horack "recognizes the fundamental principles of (1) the short ballot, (2) the concentration of authority and the location of responsibility, (3) the scientific budget, (4) the merit system, and (5) business efficiency." (State Government in Iowa, p. 61.)

The departments other than the general administrative offices mentioned in the preceding chapter should be seven in number, according to the engineers' report to the committee, and given the following titles:

- Department of Agriculture
- Department of Commerce and Industries
- Department of Public Works
- Department of Public Safety
- Department of Public Health
- Department of Education
- Department of Charities and Correction.

Each of these departments should be under the immediate control of a director general. The governor himself should assume the portfolio of the department of public safety and the remaining six directors general be appointed by the governor, with the consent of the senate.

*Report of the Joint Committee on Retrenchment and Reform*

The recommendations of the committee were set forth in a document submitted to the general assembly on November 12, 1914. This report contained the mere outline of the reorganization proposed and only the most general remarks as to the principles followed in making the grouping of administrative agencies. These observations were to the effect that Iowa as a state government is the largest single business concern within the boundaries of the state; that the present policy of creating an agency for the administration of state business and then leaving it without supervision is unwise; that any plan must have the possibility within it of meeting the growing demands of the state; that the central idea of government should be action coupled with responsibility; that the government of Iowa is a vast business concern with the people of the state in the position of stockholders and that co-ordinate organization is the means to secure the most desirable government.

The actual scheme of reorganization was radically different from that set forth in the report of the efficiency engineers. It

**PUBLIC SERVICE FUNCTIONS**

contemplated the division of all the executive functions of the state, except those already mentioned under the head of "general administration," among three great divisions designated as

Department of Social Progress  
Department of Industries, and  
Department of Public Safety

"Each of these departments would have a head or chief appointed by the governor, to have general supervision over the departments placed under him." (Recommendations of Committee on Retrenchment and Reform, p. 9.)

Under these three headings were grouped agencies for the public service functions of the state, numbering more than fifty. The following was the grouping proposed (Taken from the Report, pp. 10-12):

**DEPARTMENT OF SOCIAL PROGRESS**

(To include and have supervision over the following existing departments)

- 1—Superintendent of Public Instruction
- 2—Board of Educational Examiners
- 3—State Library
- 4—Geological Survey removed to Iowa City and placed in Geological Department
- 5—Historical Department
- 6—Historical Society of Iowa
- 7—Academy of Science
- 8—Public Archives
- 9—Library Commission
- 10—Board of Control
- 11—Board of Parole
- 12—Board of Education

**DEPARTMENT OF INDUSTRIES**

(To include and have supervision over the following existing departments)

- 1—Department of Agriculture
- 2—Weather and Crop Bureau
- 3—State Veterinary Surgeon
- 4—Commission of Animal Health
- 5—Horticultural Society
- 6—Inspector of Bees
- 7—State Entomologist
- 8—Dairy Association
- 9—Beef Cattle Breeders
- 10—State and County Fairs
- 11—Railroad Commission
- 12—Commerce Counsel
- 13—Commissioner of Insurance
- 14—Industrial Commissioner
- 15—Bureau of Labor Statistics
- 16—Banking
- 17—Bank Examiner
- 18—County Examiner
- 19—City Examiner
- 20—Public Accountant

STATE EFFICIENCY AND ECONOMY

DEPARTMENT OF PUBLIC SAFETY

(To include and have supervision over the following existing departments)

- 1—Attorney-General
- 2—Adjutant-General
- 3—State Militia
- 4—Fish and Game Warden
- 5—State Highway Commission
- 6—Custodian of Public Buildings and Property
- 7—Capitol Extension
- 8—Land Office
- 9—Meandered Lakes
- 10—Fire Marshal
- 11—Board of Health
- 12—Board of Medical Examiners
- 13—Board of Optometry Examiners
- 14—Board of Law Examiners
- 15—Board of Dental Examiners
- 16—Commission of Pharmacy
- 17—Veterinary Examining Board
- 18—Dairy and Food Commission
- 19—All Examiners of this Division
- 20—Oil Inspectors
- 21—Inspectors of Boats
- 22—Mine Inspectors
- 23—Board of Inspection for Mine Inspection, etc.
- 24—Automobiles
- 25—Board of Voting Machine Commissioners.

The report contained no statement of the functions of each of these subdivisions nor the titles or methods of choice of the officials in charge of each. The committee merely stated that under such a grouping all state agencies would be "welded together in co-ordinate activity, minor department heads under the great department leader, the three great department leaders laboring together and all in co-operation with the governor as supreme head." (*Ibid.*, p. 9.)

It was recommended that "ample authority in supervision be granted to the heads of the three great departments," but no recommendation is made which would give power of appointment or removal to the three officials. However, each appointee should be subject to removal by the governor "for cause."

This system should, according to the committee, be favored by the most ideal working conditions:

"The ability of the individual appointed should govern. Political affiliation should not control. No employe should be permitted to work for any candidate for any office or contribute to any candidacy while on the payrolls of the state. Severe penalties should follow violation of this provision, such as removal from office, imprisonment and payment of a substantial sum in money to be recovered by the state upon the official's bond by an action in equity at the seat of government. Thus will the building up of a political machine be made impossible.

"All of the employes' time should be required by the state, and anyone unwilling to work approximately the same number of days and hours per day demanded in other business enterprises should be removed from office. The time clock, universally in use in business establishments

of any size through the country, should be installed by the state. The time clock will not injure the prompt, and it will spur on the laggard, and we see no good reason why the state should not in this particular, as well as others, adopt proven business methods." (*ibid.*, pp. 12-13.)

THE EFFICIENCY AND ECONOMY COMMITTEE OF ILLINOIS

The indictment of the existing system of state government set forth in the report was one of the most forceful and discriminating criticisms of existing state organization yet made. Lack of correlation, scattered offices, overlapping functions, irregularity of reports, ineffective supervision, imperfect accounting and budgetary systems, inadequate advice on legislation and a resulting lack of responsibility were described as the features which distinguished the existing state administration. A chronological list of the administrative agencies of the state indicated the great increase in the number of the public service agencies of the state in recent years. Of more than a hundred in existence at the time of the report, over a third were created in the decade preceding the investigation while thirty-four dated back less than four years.

Recent tendencies toward centralisation in public administration were noted in the report while attention was directed to the fact that centralisation had already been started in Illinois by the creation of a board of administration for charitable institutions, a fish and game conservation commission and a public utilities commission. The loosely organized system of administration of the states was contrasted with the national system. "There can be no doubt that the greater efficiency of the national administration than that of the states is in large measure due to the more systematic organization, the more definite correlation of related services, and the more effective supervision of the various bureaus and divisions by the department officials." (Final Report, p. 28.) The strongly centralized administration of France was also mentioned as resulting in a high degree of efficiency in operation. The work of the committee was distinctly marked by an attempt to introduce an administrative structure modelled on that of the federal government.

The general plan provided for the grouping of all the administrative authorities with the exception of a few general departments in ten administrative departments, as follows: finance, charities and correction, education, public works and buildings, agriculture, public health, labor and mining, trade and commerce, law, and military affairs. The agencies left outside this grouping

were the secretary of state, the board of elections, the civil service commission and the legislative reference bureau.

The committee formulated a comprehensive plan rather than a limited survey of only a part of the agencies of administration "in the belief that the general survey is more likely to take all factors into consideration, while a partial study might lead to proposals for the offices considered which would conflict with the best arrangements for other offices not taken into consideration." (*Ibid.*, p. 31.)

Moreover the plan appeared practical in the sense that no attempt was made to form an ideal state administration, the whole reorganization being made with due consideration for the existing powers and duties of the agencies considered. For the most part no changes in substantive law were proposed, the existing functions being unchanged but provision being made for more effective administration.

No strictly uniform plan was applied to all the departments and divisions. The committee held that such an arrangement might be desirable in organizing an entirely new system and might be useful at some future time in further development of the administration. The plan included single officials for some purposes, boards and commissions for others. Bi-partisan boards received a noteworthy condemnation: "Such a requirement tends to bring about bi-partisan rather than non-partisan appointments; it makes it possible for a governor by the use of patronage to exert influence over the minority party in the general assembly; and at the same time it reduces the responsibility of the governor for the acts of such boards, without definitely fixing responsibility on the minority members or their party. On some boards . . . it is especially desirable that appointments be made without reference to party affiliations; but it is believed that this result can be better attained by custom and the force of public opinion than by an express provision in the law." (*Ibid.*, pp. 31-32.) It may be added that the expressed purpose of the committee was to provide boards only where consultation by a number seemed desirable. Four of the ten proposed departments in the plan were provided with boards as a governing authority.

The recommendations of the committee may be conveniently summarized under the heads of the departments proposed.

#### *The Department of Finance*

The recommendations regarding the department of finance,

considered in part in the chapters on general administration and on the budget, need only be summarized here. The authority in this department should be a state finance commission consisting of a state comptroller, a tax commissioner, a revenue commissioner, the auditor of public accounts and the state treasurer. The first three should be appointees of the governor and senate and the others, elective officers, serving *ex officio*. It may be noted that the duties to be imposed upon the appointive officers in this commission would be considerably more important than those of the elective officers, a fact which gives point to the ingenious way in which real centralization was sought in this important field of administration without constitutional change.

#### *The Department of Charities and Correction*

The charitable institutions of Illinois were in 1909 placed under the control of a central board. The committee commended the work of the board and stated that experience had shown the wisdom of the general plan of a central board. It found that the correctional institutions were administered by six boards which had inadequate means of co-ordination. The recommendation made by the committee advised that the administration of all correctional institutions be given over to a single board on the plan of the existing administration of the charities. It is also suggested that a charities commission, which under the existing plan acted in an inspectional capacity to the charitable institutions, should inspect the correctional institutions also. Thus the department of charities and corrections proposed would be under the control of two boards, one for charities and the other for corrections, with an additional board to inspect all of the institutions of the department.

#### *The Department of Education*

Only a partial centralization of the educational agencies of the state was recommended by the commission. It was suggested that the election of the state superintendent of instruction was not a satisfactory method but the reorganization suggested did not include any change in the method selecting him.

The recommended reorganization provided that in the field of education the functions of the state be divided among five authorities. These agencies would replace fifteen officials and boards performing the functions under existing conditions. The agencies recommended were as follows:

A state board of education, composed of the superintendent of instruc-

tion, the president of the state university, a representative of the normal schools and two unpaid members appointed by the governor and senate to have "general powers of advice and supervision in regard to the public school system and to all educational interests of the state." (*Ibid.*, p. 48.)

A state normal school board consisting of the state superintendent of instruction and eight members appointed by the governor and senate.

A commission on natural resources consisting of the governor, the president of the university and three unpaid members appointed by the governor and senate, to have general charge of the state geological survey, the state water survey, the state natural history survey, the work of the state entomologist and the natural history museum.

The regents of the university, under the existing system elected, should in the opinion of the committee be appointed by the governor.

### *The Department of Public Works and Buildings*

Within the group classified as the department of public works and buildings the proposal grouped authorities dealing with highways, water resources, fish and game conservation, public buildings, monuments and state parks. The recommendations as to this group were of two kinds: first, a plan to replace certain boards and commissions with single officials, second, the bringing of these authorities together into a single system.

The state highway commission whose functions are executive administrative and technical (engineering work) should be replaced by a single commissioner. The duties of the Illinois and Michigan canal commission and the rivers and lakes commission, both of which have important powers over public waters within the state, should be consolidated under a single, salaried commissioner according to the report.

Functions which have to do with the enforcement of the fish and game laws and the conservation of the fish and game of the state, at present under a commission, should be administered by a single commissioner it was suggested. The state parks, under existing conditions in charge of various authorities, should be administered by a single paid park superintendent. With the administration of institutions centralized, the office of state architect should be abolished. The state art commission of six unpaid members should be continued and placed in charge of all buildings and works of art constructed by the state. This would make it unnecessary to create temporary commissions to have charge of the construction of monuments and memorials. The care of the public buildings of the state should be the duty of a single official. It was suggested, too, that the various state offices located in Chicago should be brought together in a single building.

Several of the foregoing authorities primarily engaged in



engineering work of a related character should for reasons of policy be united. It was accordingly recommended that the existing state authorities having jurisdiction over highways, public waters, fish and game conservation, state parks, and building construction and maintenance be combined into a single executive department of public works, parks, and buildings. "It is proposed that this department be placed under the general supervision of a salaried commission of three members to be appointed by the governor, with the consent of the senate—this commission to have power to recommend or approve larger questions of policy, to adopt general rules and regulations, to hear appeals in specified cases from the bureau officials, and to arrange for co-operative action between the several bureaus." (*Ibid.*, p. 65.) This commission should consist of the state highway commissioner, the commissioner of waterways and the fish and game commissioner. Each of these members should be in direct charge of one of the main divisions of the department. Beside this there should be the superintendent of state parks and monuments, the state arts commission and the superintendent of public buildings, each in charge of bureaus of the department.

#### *Department of Agriculture*

The existing agencies dealing with agriculture were varied and complex. First in order was the state board of agriculture made up of twenty-seven members chosen by county agricultural societies. Practically the only duty of this body was the management of State Fair. The expenditures of this body were in 1913 over \$600,000. (*Ibid.*, p. 55.) The Illinois farmer's institute was under the direction of a board of twenty-nine members most of whom were chosen by delegates from county institutes. The duties of this board centered around the state institute, arranging the program and publishing the report. The board of livestock commissioners consisting of three members had charge of the suppression of contagious diseases among animals. The state veterinarian, the state biological laboratory and the board of veterinary examiners, were subject to the board of livestock commissioners. A board of registration of stallions for public hire consisting of five members had functions almost purely clerical. Four humane agents, an inspector of apiaries and a state entomologist, completed the list of independent and unsupervised state authorities in this division. Four voluntary organizations, the Illinois state horticultural society, the Illinois

dairymen's association, the Illinois state poultry association and the state beekeepers' association received appropriations from the state without being subject to any sort of state supervision. The committee recommended the formation of a state department of agriculture under a *secretary of agriculture* to be appointed by the governor with the consent of the senate. Under this official the department should be divided into a number of bureaus in charge of single executive officers. The names and functions of these should be:

A superintendent of the state fair to have general management of the state fair but to be assisted by a state fair commission in awarding building contracts and in adopting rules and regulations concerning premiums and concessions;

A director of farmers' institutions to have charge of state and local farmers' institutes but to be assisted by a committee of five acting in an advisory capacity;

A livestock commissioner to have charge of the "suppression of contagious diseases among animals," his actions in establishing quarantine and rules relating to the transportation of live stock and the condemnation of animals or infected property to be subject to the confirmation of the governor or the secretary of agriculture. The state veterinarian, the state biological laboratory, the board of veterinary examiners, the humane agents and a registrar of pedigrees should be under the supervision of the livestock commissioner;

An inspector of apiaries and nurseries should replace the state inspector of apiaries and the state entomologist and have charge of enforcing the law relating to the inspection of bee hives, trees, plants and shrubs;

Private associations such as those mentioned above as receiving state aid should be required to report to the secretary of agriculture, all requests for appropriations coming through his office.

#### *The Department of Health*

It was found that six authorities administered the functions of the state which concerned the public health. In addition a number of agencies in other fields had duties which carried them often into the general sphere of the public health. The committee recommended that all of these health functions be taken over by a salaried health commissioner and a state board of health, of five members, appointed by the governor and senate, the commissioner to have charge of actual administration while the board should approve rules and regulations and hear appeals. Within the department should be bureaus of vital statistics, sanitary inspection, food inspection and laboratories. The department should moreover have complete control over the licensing of physicians, pharmacists, dentist and nurses. The direct work of examination should be in charge of small commissions with their clerical work concentrated in one office.

*Department of Labor and Mining*

The state agencies for the enforcement of labor and mining laws numbered over a score:

- The board of commissioners of labor
- Bureau of labor statistics
- Eight free employment offices
- Inspection of private employment agencies
- The board of arbitration
- The department of factory inspection
- The industrial board
- Mining agencies
  - The state mining board
  - Twelve state mine inspectors
  - The miners' examining board
  - The mine rescue station commission
  - Miners' and mechanics' institutes.

The committee called especial attention to the division of power and the absence of co-ordination among the different authorities also to the fact that the powers and duties of the authorities overlapped and conflicted in a most confusing manner, as a result of which "the administration of labor laws in Illinois has been and is far below even a reasonable standard of efficiency." (*Ibid.*, p. 58.)

*The Department of Trade and Commerce*

Four state agencies exercised functions dealing with public control over corporations:

- Secretary of state, who issued charters of incorporation;
- Auditor of public accounts who issued charters to state banks, supervised state banking institutions, title guarantee companies and building and loan associations;
- Insurance commissioner;
- Public utilities commission.

The committee recommended that supervision over all classes of business corporations be vested in a single department of trade and commerce. The head of this department should be chairman of the public utilities commission which should remain under the new scheme. Four divisions or bureaus should be included within the departments as follows:

- General corporations
- Banks and building and loan associations

Insurance

Public utilities.

The first two should be in charge of a commissioner or superintendent to be appointed by the governor while the state superintendent of insurance should be retained. The public utilities commission should retain its existing composition and functions. Each bureau should have charge of the incorporation of all corporations subject to its supervision.

The reorganization thus suggested was not greatly different from the existing plan. It was not centralized except for the nominal supervision of a department head who would have no power over the appointment and removal of the officials in charge of the divisions of his department. "It does, however," said the report, "provide an official organization for securing active co-operation and harmony of methods in dealing with different phases of one general problem."

*The Department of Law*

While the attorney-general was found to be nominally the chief law officer of the state, the legal services of the administration were in fact widely scattered. The various departments had their own attorneys, there was no centralization or responsibility for legal services and advice and the way was open for conflicting opinions and unnecessary litigation and expense.

It was recommended that the department of law be composed of the attorney-general and assistants appointed by and responsible to him. That state's attorneys in the various counties should be subject to the supervision of the attorney-general and the attorney-general himself, although an elective officer, should for certain causes be subject to removal by the governor.

*The Department of Military Affairs*

No changes were proposed in the organization of the department of military affairs.

THE EFFICIENCY AND ECONOMY COMMISSION OF MINNESOTA

In bold departure from the traditional American organization of the civil administration, the recommendations made by the Minnesota commission were most distinctive. The commission decided upon a policy of recommendation a complete administrative reorganization from the governor down. It did not concern itself with the details of administration nor with the individual efficiency of the officials in charge. "It has tried

to find what is wrong with the system of government, not in the work of individuals . . . the machine is built wrong, and no one can make it work well."

It recognized that the details of administration should be the subject of careful and expert study but it did not assume this as one of its own functions. "When this broad and fundamental reorganization is effected the state officers themselves will be in a position to correct minor details. The legislature should furnish the reorganized administration with reasonable funds to employ, temporarily, expert help in that task." (Preliminary Report, p. 8.)

In spite, however, of the wide changes recommended, the commission sought and actually succeeded in planning a complete reorganization without suggesting a single constitutional change.

The defects in the structure of the administration which the commission found most objectionable were lack of administrative unity and the predominance of the administrative board. A total of seventy-five administrative agencies characterized by a wide diversity of structure, and subject to only a nominal and ineffective supervision by the governor, constituted the existing administration. Of the existing predominance of the board system, the consulting statistician of the commission, E. Dana Durand, remarked: "Minnesota, like most other states, is commissioned to death. Some of these boards are paid but most of them are either unsalaried or made up of groups of state officials serving *ex officio*. Boards are all right in their place

. . . but that place is not in the administration of government, the execution of the law. The board system tends to delay, to dissipation of responsibility, to inefficiency generally. You cannot put your finger on the man who is to blame if anything goes wrong. Several or many minds for counsel; one mind for action—that is a principle long ago enunciated, but strangely departed from." (National Tax Association, Proceedings, 1914, p. 395.)

The commission found the administrative plan of the federal government and of most of the great private corporations the corrective for these defects. It proposed the division of the state service into five great departments: public domain, public welfare, education, labor and commerce, and agriculture. Except for the department of education each of these departments should be in charge of a single administrative head. The four administrative heads should be subject to appointment by the governor. These department heads should constitute the means by which

the governor could keep control over the diversified units of administration. They should not be technical specialists but laymen and collectively should form the cabinet of the governor.

Within the departments should be bureaus with single trained specialists in charge of each. The total number of existing agencies should be greatly reduced by the consolidation and elimination of similar functionaries. The bureau heads should in most cases be appointees of the departments heads. It was strongly urged that while the department heads should change with a change in administration the bureau chiefs should remain as permanent officials.

The advantages of boards should be retained through the creation of advisory bodies chosen to co-operate with various departments. The field occupied by these boards would in no way conflict with that of the executive official. They would be advisory, investigatory, quasi-judicial and sub-legislative. Each department should have such a board which should be appointed by the governor for a long term, usually six years, in order that, on account of their peculiar duties, a reasonable degree of independence might be maintained.

"These boards will be useful advisors of the administration. They can be called upon by the governor or the directors to give advice as to policies and practices; they may make recommendations upon their own motion. They can make suggestions to the legislature if they cannot obtain the action desired through the administration. Their continuous contact with the administration will enable them often to suggest policies to the legislature that would not have originated with the regular committees of that body.

"Again the boards, by their powers of investigation, will be a useful agent to prevent administrative abuses and inefficiency. They will be the ever present outside critics of the executive, more effective critics, in some respects than the legislature itself." (*Ibid.*, p. 398.)

The sub-legislative power usually deemed so necessary to effective administration should be held by these boards. American legislatures, according to the report, have been reluctant to grant much discretion to administrative officials in the carrying out of their duties while the courts have been equally careful in approving such grants. It was urged that the boards suggested by the Minnesota commission should receive wide powers of secondary legislation. The rules and regulations formulated by these boards in their sub-legislative capacity should not, in the opinion of the commission, cover administrative practices as such, but concern matters affecting the rights and duties of private citizens and of corporations or of cities or other political subdivisions of the state. Another function of these boards

would be quasi-judicial. Disputes between state officials and citizens which could not properly be carried to the courts would be settled by these boards. For example, the order of a labor inspector considered too drastic might be subject to review by a board, likewise the revocation of a license to carry on some occupation.

The civil administration of the state should, according to the plan of the commission, be composed of (1) the governor, (2) the general and financial officers and boards, (3) five great departments administering the public service functions of the state.

The group of agencies included under the heading "general and financial officers and boards" comprised the constitutional officers and in addition the board and commissioner of civil service, the board of investment, and the board of taxation. The constitutional officers have already been mentioned in the chapter on general administration. The five great public service departments will be considered in turn.

#### *The Department of Public Domain*

It was recommended that the executive officer of the department of public domain should be a director appointed by the governor. With him should be associated a board of five members to act in an advisory capacity and to determine the policy of the administration in relation to the public domain. The scope of the department is indicated by the bureaus proposed: lands and mines, forestry, game and fish, highways, drainage and waters, buildings and purchases. Each of these bureaus should be under a single commissioner whose position should be governed by civil service requirements. Eight agencies including six administrative boards would, under this plan, be abolished and their duties taken over by the bureaus mentioned. These agencies are the forestry board, the timber board, the state forester, the game and fish commission, the highway commission, the highway engineer, the printing commission, and the state drainage commission. In addition certain duties properly belonging under the new department would be taken from general officers such as the auditor and attorney-general.

#### *The Department of Public Welfare*

The control of state institutions for both charities and correction, the exercise of all state functions relating to the public health, and the examination and licensing of certain practitioners,

it was proposed should be vested in a department of public welfare. The director should have two assistant directors and a comptroller to assist him in the administration of the duties of the department.

Under existing conditions the institutions concerned with charities and correction are governed by a board of control. The commission in its preliminary report acknowledged the good work done by this board and stated that the creation of it marked the first real step in the direction of centralization. Yet the commission deemed the plan proposed which would vest the large powers of the board of control in one of the three divisions of the new department, a great improvement in the vigor and economy of administration.

The first group of functions of the proposed department should include the control of all institutions of the state except those concerned with education and the soldiers' home. If the director should so desire he might vest the administration of this part of the department in one of his two assistants. The institutions should each have a governing officer as at present with such title and powers as the director might determine. The powers of the existing board of health should be vested in a bureau of the department governed by a commissioner who should be an "expert in preventive medicine."

The director should moreover have charge of the examination and licensing of physicians, surgeons, nurses, midwives, osteopaths, optometrists, pharmacists and embalmers. The examination required by existing law should actually be conducted by boards named by the director. In making such designations he should "give due consideration to recommendations by members of the respective professions and by professional organizations therein." (Final Report, p. 27.)

The type of administrative functions performed by this department implies a number of matters which under existing standards of administrative law should be vested in a board or commission. Three boards were suggested for this department; one a board of nine as a general departmental advisory board to supplant the existing board of health, the board of visitors and two minor boards. A board of sanatoria of three members should be appointed by the governor or designated by him from the membership of the advisory board. This board should carry on the anti-tuberculosis work of the state. The apparent need for this board's existence apart from the general health



work of the state was explained by the commission in a statement to the effect that its work is new and unlike other health administration is chiefly propaganda and therefore it seemed best to give it independence. This board would appoint an inspector of sanatoria. The third board which should remain in the new plan would be the board of parole, consisting of the chief officer of the state prison, one of the assistant directors of public welfare and another citizen chosen by the governor.

The soldiers' home should, according to the commission, remain under its present detached government of a board of seven members. It should be associated with the department of public welfare for budgetary purposes only.

#### *The Department of Education*

The department of education would, according to the plan of the commission, be the only one in which the governing authority should remain in the hands of boards. It would moreover be the only one in which the governing authority should be vested in two agencies, independent of each other. The board of regents would remain in control of the state university while a board of education would exercise certain functions connected with the other educational activities of the state.

The then existing board of regents was a board of nine members provided by the constitution. The only change recommended by the commission was the removal from this board of all *ex officio* members.

The board of education should be made up of nine members appointed by the governor. It should have charge of the administration of all laws concerning the educational agencies of the state except the university. The creation of this board should supplant the existing high school board, the normal school board the directors of the normal schools, the directors of the school for the deaf and blind and the library commission.

Appointed by and subject to the board of education should be a state superintendent of education. He should act as the executive officer of the board.

The commission proposed also that in making up the educational budget and in considering general questions of education the board of regents should combine with the board of education as a council of education.

*Department of Labor and Commerce*

Under the plan of the commission a dozen separate bureaus and departments would be supplanted by a department of labor and commerce composed of a director, three advisory boards and five bureaus each in charge of a commissioner. Administrative authority would be vested in the director of the department.

It was proposed that five bureaus should be provided in this department as follows:

A bureau of labor charged with the administration of all laws relating to the safety and well being of persons engaged in industry and commerce. These laws provide for the inspection of boilers and vessels, the regulation of the working conditions of women and children, mine inspection, the administration of free employment agencies, and the enforcement of the minimum wage requirements.

A bureau of banks.

A bureau of insurance charged with the enforcement of the state regulation of insurance companies and with the duties of the existing state fire marshal.

A bureau of standards charged with the inspection of oils, food, lumber and weights and measures in so far as such inspection is provided under existing law.

A bureau of grain inspection charged with the administration of all laws and regulations relating to the inspection, grading and weighing of grain, hay, straw and coal.

The director of this department should administer the requirements relating to the examination and licensing of barbers, electricians, horseshoers, automobile drivers. In all cases where an examination was required under the then existing law the director should designate examiners. Revocation of all such licenses should be within the powers of the director.

Instead of a single advisory board as in other departments the commission recommended three:

The existing railroad and warehouse commission, a body of three members with power to regulate railway rates and service and warehouses

A board of grain appeals of six members appointed by the railroad and warehouse commission

A board of labor of five members appointed by the governor to regulate the minimum wage, standardize workmen's compensation regulations and to act as a board of arbitration in labor disputes.

*The Department of Agriculture*

At the head of the department of agriculture should be the director, recommended the report. The bureaus, each in charge of a commissioner, should be:

A bureau of dairies charged with the administration of all

laws relating to the promotion of the dairy industry, the licensing of dairies and the inspection of dairy products

A bureau of animal industry charged with the administration of all laws relating to the protection of the health of domestic animals and the "promotion of animal husbandry" (Final Report, p. 37.)

A division of plant industry

A bureau of exhibits charged with the supervision and direction of the state fair

A bureau of immigration.

In addition the department should license veterinaries.

The advisory board of this department should consist of five members appointed by the governor and should combine with its advisory functions the regulation of animal and plant quarantine and standardization of state aid to fairs and associations for the promotion of agriculture.

#### THE COMMISSION ON REORGANIZATION OF CIVIL ADMINISTRATION OF MINNESOTA

The Minnesota commission on reorganization of civil administration formed in 1915 to some extent made the report of the 1913 commission the basis of its recommendations. Its report therefore should be considered as supplementary to that of its predecessor. It made no attempt to cover the entire field as did the former commission but limited its recommendations "to such departments of the state as in our opinion most need revision." (Inaugural Message of Governor Burnquist, 1917, Appendix, p. 21.)

The most important of the recommendations was the formation of a department of public domain to control the land, timber and mining interests of the state, and in addition a number of kindred functions such as the protection and propagation of game and fish, the management of drainage and the supervision of the building and maintenance of highways. It was recommended that this department should include bureaus of public lands, forests and immigration; mines; game and fish; drainage and waters; and highways. Each bureau should be subject to the management of a commissioner, the method of whose appointment was not suggested by the commission. The entire department should be under the supervision of a director of public domain. The commission did not state in its report, how he should be

appointed. Neither did it state whether the department should, like that proposed by the former commission, have an advisory board. The formation of this department would merge duties now performed by more than ten separate boards and departments and a number of small functions of the attorney-general and the auditor of state.

Instead of the plan proposed by the former commission for governing the educational functions of the state it was recommended that a board be formed, composed of three members, to control all state schools, except the university, and to perform a number of related functions. The formation of such a body would eliminate four boards. The chairman of the new board should perform all of the duties of the superintendent of instruction.

It was recommended that the number of members of the existing board of health be fixed at five instead of nine, and that the advisory board be abolished; and further, that a commissioner of health appointed by the governor be the executive officer of the department. It should be noted here that the report of a commission, appointed by the governor for the purpose of investigating the administration of the health functions of the state, was included in the same message as that of the general commission on reorganization. The recommendation of the health commission differed in only one respect from the other. It advised the appointment of the commissioner of health by the board rather than by the governor.

In addition to the recommendations summarized above, the commission suggested the creation of a state board of investments and a department for the inspection, grading and weighing of grain.

## CHAPTER VII

### RESULTS AND CONCLUSIONS

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This review of the studies and recommendations of the various state agencies created in the name of economy and efficiency would not be complete without a reference to their accomplishments. Their proposals have been discussed at length because they afford a very significant compilation of the trend of thought among men in widely scattered sections of the country who have been assigned to investigate and report on the needs of state government. A marked similarity may be noted in the majority of reports,—nearly all of them aiming to suggest simplification in governmental machinery and the consolidation of a multitude of offices. The evils seem to be widespread and all the states suffering in varying degrees from the same afflictions.

Whether the recommendations were adopted or not by the various legislatures, some of them more or less favorable, others hostile, the reports are interesting and valuable. But it is important to learn just what the various legislatures have enacted into law as a result of these studies. Changes are often effected very slowly and even where no action has been taken on the reports, it may be that seeds have been planted that will germinate in the future.

A brief summary of what has actually been achieved in a number of states to date, follows.

#### *The State Board of Public Affairs of Wisconsin*

The activities of the board of public affairs of Wisconsin seem to have undergone marked change during its six years of existence. As pointed out in Chapter I, it began with a formidable program of work prescribed for it by legislative acts. For a period of two or three years it was very active as is indicated by the list of surveys given in the general report, and quoted above. Its chief work during the first years of its existence was the now famous survey of the state university, in which its final recommendations were on the whole favorable to the university. The accounting system established for use in state institutions was likewise a product of this portion of its history. Since 1914 practically all of its time has been given to the budget.

The state administration has not been simplified in any important respect as a result of the recommendations of the board of public affairs. Aside from the budgetary changes, practically the only piece of constructive legislation which can be traced to it is the reorganization of the state printing board.

Its success in bringing about more satisfactory procedure in appropriations has been steadily increasing. In preparing the 1917 budget the departmental estimates were not merely edited and passed on to the legislature, as in 1913 and 1915. Reviews of all of them were conducted by means of field examinations by the board and at public hearings. It was quite evident during the 1917 session that the departments, while not compelled to do so by law, have been more disposed to come to an agreement with the board in these hearings than to take chances in contesting the recommendations of the board before the joint finance committee of the legislature. It is worthy of note, however, that the budgetary system of Wisconsin does not yet approach executive budgetary procedure. It is quite improbable according to tendencies which were evident during the session of the legislature in 1917, that the legislature is at this time willing to increase the power of the executive in making up the budget.

While the Wisconsin board has been continued from session to session and has on the one hand escaped radical reorganization, as in the case of the Massachusetts commission, and on the other has not been summarily abolished like the New York department of efficiency and economy, it has lost rather than gained in its influence upon the public and the legislature. The board has been able to accomplish little towards simplifying state administration. It has given practically all of its time to the preparation of the budget and the investigations incident thereto. It has become almost solely a budget board.

#### *The Economy and Efficiency Commission of New Jersey*

The methods pursued and the work accomplished by the New Jersey commission give convincing proof that a limitation of scope and of policy in the work attempted by such a body is most desirable in making a start toward simplified state administration. In the first place it was created for a single definite purpose, namely, that of "considering the best means to consolidate various boards and to broaden the powers in one central board or boards." Realizing the magnitude of the task the commission considered in detail the problems involved in the organi-

sation of a limited number of existing agencies. Where such a plan seemed feasible it recommended the consolidation of them in one agency and suggested, in connection with such consolidation, practical means for adjusting the functions of each. No attempt was made to devise a large plan including the entire administration. Its method of investigation rather proceeded from details to generalities. The task imposed upon the commission by such an examination of details was very great. Accordingly, it did not attempt to cover the entire field of state administration. The final body of recommendations as set forth in the second report constituted a real effort toward centralization of administration, and their adoption by the legislature has given New Jersey an immeasurably improved administration. The policy of attempting partial centralization after a careful study of functions and of existing conditions has in New Jersey been justified by the attainment of actual results.

It is interesting to note that the committee did not continue to make recommendations after the publication of the second report until action of the legislature had resulted from the suggestions made. The third report took the legislature to task for neglecting the proposals of the previous year, reiterated the merits of the recommendations and submitted an expert opinion, by way of strengthening the appeal.

This method of attack brought a large measure of response from the legislature. Laws were enacted creating departments of conservation and development, commerce and navigation, taxes and assessments, and shell fisheries. These new departments perform services which previously required nineteen separate agencies. (N. J. Session Laws, 1915, Chs. 241, 242, 244, and 387.) Another law was enacted which provided for a monthly meeting of executive officers representing the departments of public roads, public utilities, motor vehicles, conservation and development, commerce and navigation, taxes and assessments, together with the state architects and the representatives of such other departments as the governor may direct. (Session Laws, 1915, Ch. 190.)

The legislature of 1916 enacted further legislation providing for the reorganization of the departments of labor and agriculture. (Chs. 40, 268, 269, Session Laws, 1916.) By one of these acts a department of labor was created with seven bureaus or divisions, as follows: inspection, structural inspection, electrical equipment, hygiene and sanitation, engineers' and firemen's

licenses, industrial statistics and employment. The department is under a commissioner of labor appointed by the governor with the advice and consent of the senate. The new department of agriculture has all of the duties and powers formerly held by a number of departments, boards and commissions which were concerned with the agricultural interests of the state. The governing authority is in a board of agriculture and a secretary of agriculture who is the administrator of the department.<sup>1</sup>

It is quite evident that the recommendations of the commission are from the standpoint of administrative efficiency open to considerable adverse criticism. No uniformity of term was suggested for the various boards recommended. No mention was made of the number of members of the proposed board of prison control. Departments of labor and agriculture were recommended, but no description of the proposed administration of either were given in the report. The relation of the salaried commissioners to the unsalaried boards recommended in a number of instances did not seem to be arranged in a satisfactory manner. The terms of the semi-legislative boards suggested for some departments would allow the majority of the board to hold over into the term of a new governor who might appoint a commissioner hostile to the board. The board in such a case could not remove him but could make rules for his actions and serve as his adviser.

The final report of the commission issued in 1916 has already been discussed in connection with its chief recommendation, state purchasing. Unquestionably this report is the most complete contribution to the subject of state purchasing that has yet appeared.

In addition to the legislation described above, a state budget law bearing the name of the chairman of the commission was enacted in 1916<sup>2</sup> and a central purchasing act following the line suggested by the commission was also passed. Governor Edge devoted considerable attention in his message to the work already accomplished in centralizing administration and urged further reorganization in the same direction.

Without doubt, the economy and efficiency commission of New Jersey has played no small part in giving to the state a more effective administrative organization.

<sup>1</sup> For further details of the advanced legislation of the 1916 session in New Jersey see the *American Year Book*, 1916, pp. 198-199.

<sup>2</sup> See MUNICIPAL RESEARCH, No. 70.



*The Commission on Economy and Efficiency of Massachusetts*

The chief value of the Massachusetts commission has been in the preparation of a vast number of special reports upon details of administration for the legislature and the governor. These short reports in nearly every case show the marks of excellent workmanship and precise compilation of information. It may be said that the success of the Massachusetts commission in thus providing expert service at the demand of legislature and governor has shown the need of such a department in every state. But these functions of the commission do not enter into consideration in this review. A body equipped to furnish such services should be removed from the critical attitude of a body charged with proposing the reorganization of the government. To be useful in the former duty an efficiency commission must not attempt reforms which are likely to generate political controversy or lead office holders to fear that their assistance may become a force for the elimination of positions or the emoluments thereof. The Massachusetts commission attempted to perform both functions with rather questionable success.

Its recommendations for the simplification of administration were set forth in two reports: one on the reorganization of boards and commissions having supervision over state institutions and another recommending a budget system.

The former was perhaps the most important constructive piece of work attempted by the commission. It presented a plan for centralizing the control of all state institutions in a board of commissioners empowered to choose a single administrative director. In addition an alternative plan by which control would be vested directly in the commission was suggested but not recommended. This report brought forth a very vigorous reply from the Massachusetts state board of charity (Mass. Senate Doc. 440) in which the recommendations of the commission were seriously questioned. No actual legislation resulted from this report.

The report on the budget issued in 1916 suggests vesting in the commission on efficiency and economy the duty of preparing the budget. The measures recommended for the preparation of the appropriation bills were sufficiently complete to insure great improvement over existing conditions. The commission on economy and efficiency would have had the power to make all investigations into the needs of the departments of government which "may be necessary" in the preparation of the budget for

the governor. It was further recommended to the general court that budget days should be designated and that single appropriation bills be passed for each department. The report failed to suggest the method to be followed by the governor in presenting the budget to the legislature. No reforms in legislative procedure were suggested.

The constructive proposals of the economy and efficiency commission for administrative reform led to no immediate result. No legislation has been passed by the general court since the formation of the commission, which may be attributed to its recommendations. Political motives seem to have been the reason for substituting the supervisor of administration for the commission. Since that action was taken nothing has been done by the legislature which has a bearing upon the subject of administrative reorganization. As an active force for bringing about simplified administration in Massachusetts the supervisor of administration has as yet accomplished no sweeping changes.

*The Committee on Retrenchment and Reform of Iowa*<sup>1</sup>

The report of the efficiency engineers employed to assist in the survey of the state administration for the committee on retrenchment and reform of Iowa presented a plan of government which seems to have a considerable amount of mechanical merit. The only political consideration that limited the reorganization planned by this body was the constitution of the state. The changes recommended were so devised as to make a change in the constitution unnecessary. A clear distinction was made in this plan between the general administrative offices of the state and the public service agencies. The finance department which is, in so many states, included among the public service agencies and so considered in planning reorganization, was in this report properly placed among the general offices. The proposal, however, here made to combine the auditor and treasurer in one department would not be generally accepted as representing sound administrative policy. Moreover the creation of a chief accountant apart from the auditor of state would not simplify but would rather make more complex the existing arrangement. The numerous legal questions concerning elections decided by the secretary of state might make the combination of the two offices desirable in some respects, although in the

<sup>1</sup>The conclusions herein made are based upon Professor Horack's paper not after examination of the report itself.

proposal of the engineers there was no suggestion as to making the duties of the secretary of state less complex and illogical. The suggested departments for the administration of the public service functions appeared in general to follow the lines of most recent plans for the reorganization of state government. On the other hand the suggestion that the governor assume the direction of the department of public safety was not sound if, as seemed to be the idea, the governor was to be placed actively at the head of the administration.

While there was undoubted merit in the generalities of the efficiency engineers, their actual contribution to the immediate problem of reform seems to have been slight. There has been no considerable legislation as a result of the recommendations of the engineers with the possible exception of an act of the general assembly passed in 1915 which required the governor to submit along with his official message, "a budget which shall contain in detail general information and in general form his recommendations to the general assembly for appropriations for all the different departments and boards and state officials, together with such explanation thereof, as he may desire to present." (Secs. 191-a and 191-b. Supplement to the Code of Iowa, 1915.) It has been stated that this act was suggested by the report of the efficiency engineers although there is no definite proof to that effect. No other enactments have resulted from their report. Moreover it should be noted that the report failed in almost every particular to influence the committee under whose auspices it did its work. On the whole it seems that while the proposals had a considerable amount of merit in showing the type of administrative organization to be desired, their application was made in too mechanical a manner and with too little regard to actual political conditions.

The recommendations of the committee on retrenchment and reform were included in twelve printed pages. The report of the efficiency engineers made a year before was only incidentally referred to, while the recommendations of the committee were widely different.

In its consideration of the administration the committee made a large number of generalizations which would receive unquestioned support from all friends of improved governmental methods. The administration "without a single administrative head," the chief cause of waste and inefficiency, "is due to the system under which it is conducted" and "it is necessary that the gover-

nor be vested with authority to appoint the various officials through whom he must carry out his policy." Moreover, "criticism of men responsible for the conditions sought to be altered is not intended." The proposals which would divest the elective officials, such as the secretary of state, the auditor and the treasurer, of the duties which are not in keeping with their proper principal function, are commendable.

But in the actual constructive recommendations made there is no actual promise that such conditions as the committee deploras may be remedied. As a matter of fact the division of the state's agencies into three fields with a director over each seems in its net administrative significance to do nothing but provide three additional officeholders with rather anomalous powers and little real responsibility. In the grouping of state agencies proposed there was no provision for consolidating the powers of boards and officers possessing similar functions. This field of inquiry was left for "later consideration."

Abundant material for such consideration seemed to be at hand. In the great departments proposed were placed agencies performing similar functions but entirely independent of one another. For example, the proposed reorganization would have continued a state library board and a library commission; a state veterinary surgeon and a commission on animal health.

Methods of appointment would have remained as diversified as ever. No less than ten methods of choosing division and bureau heads were allowed under the plan. Boards, societies and single commissioners were mixed without discrimination and without any regard for harmonizing the type of agency with the function it should perform. One board was provided for the purpose of examining voting machines while another was continued for the express purpose of appointing the state geologist.

Terms of office would vary as at present, in the absence of provision to the contrary, from one year to "the governor's pleasure." In one board, the state board of agriculture, part of the members are now chosen for one year and the remainder for two. The board of optometry examiners is chosen for one year while the dental examiners are appointed for five.

The selection of the agencies to be parts of the three divisions showed little logical plan. Eight boards of examiners were scattered among the three divisions. The board which supervises the examination of teachers was placed in the department of social progress while the law examiners were placed in the

## RESULTS AND CONCLUSIONS

department of public safety. A number of the agencies which concern agriculture were placed in the department of industries while the dairy and food commission was put down under public safety. The industrial commissioner appeared under industries while the inspectors of mines were classified under public safety.

The list of agencies given contained many items which need some explanation on account of the fact that they are not names of agencies at all, as "Meandered Lakes," "banking," and "automobiles."

The chiefs of the three proposed departments were to be appointed by the governor. They were not assigned any power of appointment and the committee failed to indicate any way by which any authority over the divisions within their department might be given a semblance of reality. The report suggested no duties for them except the preparation of reports. Even this function should, according to some students of administration, be vested not in three but in a single division.

The creation of such a scheme as the committee suggested would have three positive results; it would complicate the framework of administration by adding three offices to the existing list, would give the governor three more appointments to make, and add the salaries of three officers to the annual expenses of the state.

The budgetary recommendations of the committee provided for the preparation by the governor of a list of estimates showing, in addition to the requests, the grants of the preceding period with explanations as needed. There was nothing to suggest that a permanent budget commissioner should be provided nor was there any recommendation that the legislature should make any procedural changes in the direction of improving the appropriation process.

A few scattering suggestions completed the report. These included:

The use of time clocks for the state employes

The adoption of the dictaphone, the photographic method of making copies, omission of duplication of records, use of carbon copies

The adoption of permanent numbers for automobiles instead of annual changes

The extension of the power of the board of control to the purchasing of state supplies.

It may be said in conclusion that while the recommendations

of the efficiency engineers seem to have erred in the direction of suggesting too many and too sweeping changes, the committee went to the other extreme. In the committee report no concrete suggestion was made to which a single officeholder or legislator could object. The reiteration of generally accepted generalities seems to be the chief accomplishment of the committee. As can be seen from the description given, no considerable change in the direction of administrative simplicity would result from the adoption of the entire sum or recommendations made. On the contrary, it has been shown that more officeholders and more salaries would be assured.

No legislation resulted from the recommendations of either the efficiency engineers or the committee in either the 1915 or the 1917 sessions of the legislature except perhaps the budgetary law above mentioned.

#### *The Efficiency and Economy Committee of Illinois*

The resolution creating the Illinois committee imposed upon it two duties; the preparation of a more complete system of accounting and the formulation of a plan for the reorganization of the state administration. It is important to note that it recognized at the outset the limitations of a single investigation in attempting the reorganization of state government and that it planned its work accordingly. It decided that inasmuch as an accounting system should depend upon administrative adjustment, the latter should be the first consideration of the investigating committee. It was further apparent that the funds provided (\$40,000) and the time allowed would not permit a proper study of the administrative agencies, and a set of proposals for their reorganization was prepared while only a preliminary study of accounting methods was made.

A competent director of the investigational work was secured, who divided the administration into a number of fields for investigation. Each field was assigned to an investigator, familiar with the principles of public administration and with specialized knowledge of the field to be surveyed. These studies were not made according to the preference of the individual investigator, but all were conducted in accordance with a single plan approved by the committee. (See Report of Efficiency and Economy Committee, p. 14.)

The committee met at frequent intervals for a period of nearly a year and in June, 1914, a preliminary report was issued as a

basis for public consideration. Public hearings were held at which the testimony and advice of a large number of public officials were obtained. The proposals were thus submitted to debate and criticism by the officials who were individually concerned in the reorganization and who might have valuable practical counsel to offer. This combination of the comprehensive compilation of information and advice by trained specialists with the practical experience of officeholders resulted in recommendations which do not possess the academic generality of the Minnesota recommendations nor the unreality of those advanced by the Iowa committee. In equipping itself for work, in planning a task and in unremitting attention to its work, the Illinois committee set a standard which no other similar commission has yet duplicated.

The report of the committee was contained in a volume of more than a thousand pages. Of these, all but eighty were given to the special reports already named. Each of these latter was prepared with scholarly precision and the charts were well constructed and informing. In addition, the bills submitted to the legislature with the report bore evidence of competent draftsmanship. In every way the printed report of the Illinois committee was a finished product. It presented a strong contrast to the amateurish final report of the Minnesota commission and the hastily prepared superficiality of that of the Iowa committee.

The scantiness of systematic information concerning state administration is immediately evident to one who has occasion to investigate any of its varied divisions. When the Illinois committee did its work the available printed information on state administration was practically all included in scattered articles in periodicals, a few monographs narrowly specialized and tons of unreadable and poorly edited reports of state boards and commissions. The Illinois committee placed the student of state government under deep obligations by publishing the first comprehensive treatise on state government in the United States. In many respects the combined studies included in the report constitute a veritable mine of information on the subjects treated.

The recommendations themselves are conditioned by the twofold limitation imposed by the committee. It was decided not to recommend changes which would involve constitutional amendment and, as far as possible, to consider only changes which in the opinion of the committee would be accepted by the legislature. The reformation of state administration cannot progress more rapidly than the education of the legislators. In

Illinois, for example, the provisions for senatorial approval of the governor's appointments were retained in the recommendations in spite of the fact that the best judgment of the majority of the committee pronounced it undesirable. For this reason also, no strictly uniform plan of organization was proposed for each of the departments, "some variation in the organization for different purposes seems better suited to existing services and present conditions in this state." (Report, p. 31.)

It may be open to doubt whether the committee should have made no distinction between the general administration and the public service functions of the state. In this respect the Minnesota plan seems to have been framed with more consideration for the organic distinction between the two groups. Protected as they are in most cases by constitutional provisions, the older officers with functions of a proprietary character will be the last to be changed and must, owing to the nature of their work, be distinct from the newer services. The Illinois committee includes in its group of departments, two, those of finance and law, which are of a proprietary character, while the offices of secretary of state, the board of elections and the civil service commission are "outside the main executive departments."

The recommendations of the Illinois committee were not enacted into law during the session of 1915 excepting for a revision of the state contract laws, reorganizing the system for making contracts for printing and office supplies. They were not forgotten, however, for during the state campaign in 1916 the report of the committee was endorsed and supported by practically all of the candidates for governor both before and after the primaries. (Fairlie, J. A., "Civil Administrative Reform," N. Y. *Evening Post*, March 29, 1917.) The platforms of both great parties commended it and Governor Lowden announced in his message to the legislature, January, 1917, that "one of the imperative needs of the State is the consolidation of its multiplied agencies into a few principal departments." In spite of the fact that the legislature of 1917 was of a different political complexion from that of 1915, a consolidation bill was passed which put into effect substantially all of the recommendations of the commission. In actual results, therefore, the work of the committee has effected all that its most hopeful friends could have expected.

#### *The Economy and Efficiency Commission of Pennsylvania*

The survey of the Pennsylvania economy and efficiency com-



mission covered a very large part of the administrative organization of the state. The report was made up of many separate items, in some cases suggesting a change in the administrative details of a single office, in some recommending new agencies or functions, and in a few the consolidation of agencies performing similar functions. The items were not arranged in any definite order but were thrown together indiscriminately. The commission evidently worked without policies or plans, but sought within the limitations of time and funds to suggest a number of practical methods for instituting economies. It is to be doubted whether such attempts can be fruitful of much actual improvement in state administration. The appendix to the report, showing in brief compass the officers of state administration with the names of present incumbents and salary is of some value. No legislation has been passed which can be traced directly to the recommendations of the commission and the immediate prospect of reorganization is considerably limited by a bitter factional fight in the majority party of the state.

*The Efficiency and Economy Commission of Minnesota*

The efficiency and economy commission of Minnesota, as has already been noted, was selected by the governor, served without pay, and raised the necessary funds by private subscription. Consisting of thirty members, it was large enough to represent a number of interests in the state. The governor apparently sought to obtain this variety of interest and viewpoint in making his selections, and in a large measure he succeeded. It has not been said by any of the critics of the plan proposed that the members were actuated by the more questionable political motives that seem to have been present in many other investigations of the kind.

A definite policy was adopted by the commission—not to concern itself with changes affecting the functions of the state, but with procedural readjustment. It further decided upon general rather than detailed changes. Perceiving the limitations of such a body, it engaged in addition to a secretary, a trained statistician of national reputation, Dr. E. Dana Durand, as its consulting statistician. It further divided itself into committees for the consideration of the various fields of administration. This process of equipping itself for service deserves commendation.

The two reports issued were quite different in appearance and context. The preliminary report did not have the formidable

appearance of many public documents. The recommendations of the commission were simply and clearly stated and the reasons for the changes proposed were set forth in a convincing manner. The effect upon public opinion of such an appeal was likely to be very favorable. It should be noted, however, that the double page chart illustrating the proposals was rather crude and amateurish.

The final report, which it might be thought would be an appeal to public opinion set forth in an attractive and striking manner, was rather a poorly drafted detailed bill for reorganizing the state government. Perhaps had the commission been able to see what after several years of the efficiency movement, is now very evident, that unless the demand for reorganization of state machinery is backed by a considerable public opinion, there is little chance that the governments will reform themselves, it would not have allowed its recommendations to be buried (at the very moment when action by the legislature was demanded) in a rather obscurely written and unattractively printed legal document eighty pages in length. An understanding of the bill can be reached only after long and careful study. This method of appeal naturally prejudiced both the public and the legislature against the whole efficiency movement and gave the officeholders the opportunity to prevent any considerable accomplishment of the purposes of the movement.

A very forceful feature of the plan of the commission was the insistence upon the relationship of three features of state administration necessary to efficiency and economy:—reorganization of the executive service, the merit system and the budget. The preliminary report made it clear that the three features are necessary one to another.

The final and the preliminary reports differed in that the former recommended five departments and the latter six. The final draft placed the finance department among the general offices instead of among the service departments. In this change it followed the best opinion as to administrative organization. Finance is a general function and should be grouped with the general administrative or proprietary agencies. The plan of modeling the new machinery after the form of the national government seems to have strong support among students of public administration. The power of appointment suggested both for the governor and the directors was clear and direct. In this respect, perhaps, the commission exceeded all of the other commissions whose work has been reviewed. The necessity of

conformity to the constitution made the provision of confirmation by the senate necessary.

The recommendations for improvements in the civil service system were set forth in considerable detail. In safeguards against abuse, in flexibility, and adaptability to administrative conditions, these recommendations appear to satisfy the requirements which the limited experience of states has shown to be necessary.

The budget system proposed, provided for:

The submission of estimates to the governor

The amendment of estimates at the discretion of the governor

The inclusion of estimated receipts with requests for appropriations

Submission of a budget by the governor to the legislature.

Moreover, in the provision already referred to concerning the allotment of funds, the commission contributed a very important and desirable feature to budget procedure. No recommendations were made concerning legislative methods.

The net result of the work of both Minnesota commissions has been very small. A law was passed in 1915 embodying most of the recommendations concerning a budget, but this was all the legislation that might fairly be ascribed to the influence of the commissions. The membership of the second commission differed widely from that of its predecessor, being made up entirely of members of the legislature. Its net product was far inferior to that of the larger and more representative body which preceded it. Its recommendation for a department of public domain was rejected by the legislature. If the recommendations of the Minnesota commissions have been productive of public opinion favoring sweeping administrative reorganization, such opinion has not become sufficiently powerful to influence the legislature.

However, the Minnesota plan has perhaps been more generally known outside the state than any other similar scheme, with the possible exception of that of Illinois. As a factor in the education of the public at large in the need of administrative reorganization, it has been a very considerable force.

*The Commission on the Consolidation of State Boards and Commissions of Connecticut*

The work done by the Connecticut commission was completed in so short a time and its scope of operation was so limited, that

it cannot take an important place among the documents under review. A substantial collection of recommendations, however, was made, which indicate that an appreciation of the importance of state reorganization is present in Connecticut and that a real desire exists for improvement.

*The Legislative Investigating Committee of Alabama*

The Alabama committee was given almost unlimited authority to search the departments of government for waste and inefficiency. An appropriation was made which permitted an expenditure of \$4,000, while an additional \$1,500 was supplied through the use of the governor's contingent fund. As a result of the investigations, the committee compelled the return of \$8,039.02 to the state treasury. In many other ways it is evident that the state has profited financially from the investigations of the committee.

In the larger aspects of its work, in contributing to the public understanding of the administrative functioning of the state, in suggesting methods of reconstructing the administrative system in the interests of permanent economics and increased efficiency, the contribution made by the committee is considerable, though not remarkable. It pointed out clearly the laxity of the accounting methods of the administration, the need of reform in appropriation methods and a number of duplications of administrative machinery, all of which called for attention by the legislature.

The recommendations concerning the budget, the extension of the power of the attorney-general, the centralization of state printing and of state accounting were perhaps the most important and most carefully considered which the committee made. None of these were mere sham recommendations made only for political purposes; they were genuine suggestions for substantial reorganization in the direction of efficiency. They constitute the features of the report which distinguish the Alabama committee from a number of others recently appointed, whose powers of investigation have been used to discover cases of individual inefficiency and corruption. The Alabama committee, however, barely escaped being merely a graft hunting body of the same kind. Of the fifty-eight pages of the printed report, more than half are devoted to criticism of individuals, while twelve are devoted to an itemized statement of extravagance in the personal expenditures of the governor and the fish and game commissioner.

*The Survey Committee of State Affairs of Colorado*

It is difficult to form an estimate at this time of the work of the Colorado committee on account of the fact that the pretentious program of work it has undertaken is scarcely more than started. A number of the reports are already in the hands of the committee and have been transmitted to the public, but the committee itself has made only a few direct recommendations for the correction of matters which in its opinion need immediate action. These include the revision of the funding methods of the state, the establishment of an auditing system for the state which would be centralized in the office of the state auditor, an immediate provision for some form of budgetary procedure pending later constitutional amendment, reorganization of the administration of the state lands and the continuance of the survey committee for an additional two years.

It is quite evident, however, at this time that should the committee complete its task, the result will be the most complete survey yet made by such a commission. In the methods it has adopted and the character of the work that has already been accomplished the committee seems to have avoided the errors of other commissions and to have followed the methods that have brought the largest measure of results. That it has won no little influence in Colorado is shown by the fact that both the outgoing and the incoming governors urged the continuance of the committee. The present governor, Julius C. Gunter, said in his inaugural address:

"The results accomplished show that the work of the Committee has been done in a spirit of high-minded public service. A study of the various reports discloses the necessity for the continuance of this, or a similar committee, in such manner and with such powers that the continuity of the work may be preserved. To accomplish this an adequate appropriation should be made."<sup>1</sup>

*The Efficiency and Economy Committee of Kansas*

As is indicated in a preceding chapter, the committee formed in Kansas in 1915 was given practically unlimited power to investigate the government of the state. It was limited in membership to three and in funds to \$500. Consequently, the committee was unable to employ trained assistants but conducted the investigations in person. At the first meeting the work was apportioned among the three members, each having a field of administration to "investigate." Senator Joseph charged that

<sup>1</sup> The committee was not continued by the legislature of 1917.

Senator Lambertson, one of the other members, failed to keep within his own field, and investigated "all the state schools, and most if not all of the state offices." He claimed, moreover, that the third member contributed nothing to the final report, as "the senator wrote the most of it before Mr. Burton came to town and the balance after he went home." Therefore the official report of the commission, signed by two members, is a compilation of the recommendations of one man who made a cursory investigation of whatever fields of state government he chose, with the addition of four items contributed by a member who conducted an independent investigation but refused to sign the committee report.

Most of the recommendations of the general report have already been mentioned. The budgetary recommendations provided that the departments submit, in the form used in Wisconsin, their requests to the governor whose sole duty should be the addition of any recommendations he might deem wise. This constitutes merely a convenient means of presenting the estimates to the legislature and cannot in any sense be called a budget system.

The recommendations for substituting single commissioners for a number of boards included provision for an advisory board in only one case. No suggestion was made in any case as to the method of appointing these single heads. Civil service was generally condemned. A few recommendations of some merit concerning financial procedure and state educational institutions were included in the report.

The report, for which a maximum of five hundred dollars was appropriated by the state, covered eight printed pages. It gave evidence of hasty preparation and contained a large number of shallow generalizations. Its concrete recommendations were not backed by any convincing array of facts. For example, the office of state architect was condemned and the recommendation made that special architects be engaged for "distinct kinds of buildings," as the result of investigations which are described as follows:

"After visiting all the state's buildings, walking over all their floors, and having had pointed out to us the faulty construction, wasted floor space or the unsuitable design in probably three-fourths of them, we wonder if we are not expecting too much of our state architect."

The report of Senator Joseph was considerably more voluminous than that of the committee and bore upon the cover the reason for the publication of a special report:

"This report is published by me because Senator Lambertson, the chairman of the committee, for some reason, did not want my report published in connection with the principal part of his report."

Three-fifths of this special report dealt with education. Of this, a large part was concerned, not with administrative changes, but with specific defects in the state educational system, nine pages (one-fifth of the report) being devoted to a description of tests which the senator had given some school children. A large number of photographs showing unsatisfactory conditions in a number of state schools were included.

The ten drafts of bills and resolutions included as appendices to Senator Joseph's report were very imperfectly constructed.

#### *The Efficiency Commission of West Virginia*

The outcome of the newly appointed governor's efficiency commission in West Virginia should be of considerable interest. It is evident that the governor made a political issue of reorganizing state government in the way of efficiency and economy. He gave a considerable amount of attention to the matter in his campaign and began his term with the sweeping budgetary proposal already mentioned. His projected constitutional amendment modeled after the Maryland plan was defeated in January by the legislature, but he promised in his inaugural address to carry the matter to the electorate and to make it an issue when the next legislature is selected. His appointment of an efficiency commission after the rejection of the project by the legislature seems to foreshadow important developments. It may be interesting to record that Governor Cornwell is of the opposite party from the majority of the legislature and is the sole representative of his party among the elective officers of the state.

#### THE PERMANENT VALUE OF THE ECONOMY AND EFFICIENCY MOVEMENT

The permanent commission or department was tried in Wisconsin, Massachusetts and New York. As has been stated in connection with the Wisconsin board, these agencies were created for a twofold purpose. They were to act as an adjunct of the administration or the legislature for the purpose of gathering data, conducting investigations of a minor nature and devising means to meet minor problems of administration or legislation. In performing this function the Massachusetts and Wisconsin

commissions were subject to call while the New York department had its work prescribed by legislative act. The further duty of conducting independent examinations and investigations with the power of suggesting changes in administration was given to them.

If the experience of the three agencies mentioned is of any value, it indicates that there is almost insuperable difficulty in attempting to join these two types of work. If an administrative agency dependent upon the legislature or the administration is to be of positive value in supplying expert services, it cannot maintain a critical attitude toward administrative arrangements upon which depend the very tenure of the officers served. It cannot long perform both functions. The Wisconsin board has become an agency for the preparation of estimates in a properly edited form for the use of the legislature. It still can conduct a certain type of investigation, such as into the working of the mothers' pension act. But as a force for administrative renovation, it is not effective. The same has been true of the Massachusetts commission.

The New York department was given the widest power of investigation ever placed in the hands of a state office in New York. It exercised this power with such vigor and effectiveness that the first change in party control in the state resulted almost immediately in the abolition of the department by a strict party vote.

The Minnesota commission represented another type of organization. It partook of a semi-official character, inasmuch as it was appointed by the governor, but it was composed of private citizens and supported by private funds. Of this type are the new commissions recently provided in West Virginia and Oregon. It appears possible that such a commission, with a high quality of personnel, may perform very important work. The relative failure of the Minnesota commission was not due to its method of creation or to its official character.

The legislative committee has produced varied results. The Illinois committee, made up of members of the legislature who were chosen by the legislature, equipped itself for very effective work. On the other hand, the Iowa, Kansas and Alabama committees seem to have been unequal to the task imposed upon them. The legislative committee formed for the purpose of investigating the administration is very likely to degenerate into an ordinary graft hunting agency. This was true in Mississippi



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and South Dakota, and to some extent in Alabama. It is also to be noted, that with the possible exception of Illinois, legislatures have been reluctant to grant such committees a sufficient appropriation to employ competent assistance and to conduct the detailed investigations necessary.

The work of the commissions has furthermore shown the extreme difficulty of bringing about thorough reorganization without constitutional amendment. As has been indicated, the commissions of Illinois, Minnesota and New Jersey were able to plan a more or less systematic reorganization which could be accomplished with only statutory changes. Yet in these, the centralization actually accomplished would be rather apparent than real. The older officers of the state are in practically all cases protected by the constitution and no administration can be built around these offices, constituted as they are, and at the same time be properly controlled by the governor.

The lack of suggestions for a governor's cabinet, the failure of the commissions to lay emphasis upon the need of a short ballot, and the inadequacy of the budgetary recommendations are indicative of the need of constitutional change before a fundamental reorganization of the administration can be accomplished. In fact, a number of observers whose opinion is worthy of consideration, doubt the advisability of attempting any considerable change in the organization of the administration without first effecting constitutional amendment. Professor William A. Schaper, in discussing the need of a constitutional convention in Minnesota says:

"Shall the administrative departments and boards be reorganized first as far as the existing constitution permits; or shall the fundamental and necessary changes come first? For myself I can see no other satisfactory way of proceeding than to lay the proper foundation for the new order of things first, before building the superstructure. If my conclusion is correct, then this and every other public body of men interested in improving and perfecting our local and state governments should begin to look forward to a constitutional convention." (*Minnesota Municipalities*, April, 1916, p. 13.)

Yet, in most states the need of economy is so pressing that the infrequent meetings of a constitutional convention cannot be relied upon for relief. The multitude of public service agencies created in recent years are in most cases statutory bodies and their effectiveness can be immensely increased through co-ordination brought about by statutory changes. The efficiency and

economy movement in states will undoubtedly continue, and instructed by the experience of the older commissions, the new ones should perform distinctively useful services. The experiences described in the histories of the agencies included in this study throw light on a number of important considerations which may be of use in future studies.

Attempts to formulate a system of administration through imitation or *a priori* reasoning seem doomed to failure. Perhaps the best example of this is contained in a recent suggestion for commission government of a state. Because this type of government found favor in a number of cities, the inference was drawn that it would be well to apply it to a state. While there are undoubtedly some reasons for such a form of state government, the supporters of the unique proposal evidently lost sight of the fact that a state is not a city. If the other superficial analogy of the state and the business corporation holds good, we shall hear next of state business managers. Experimentation may be productive of useful results, but it should be attempted only with a sense of proportion and of differences in scope and purpose.

From this review it is plain that the results were in most cases dependent upon the manner in which the commission equipped itself for its task. The commissions which placed the gathering of data and the formulation of advice in the hands of competent specialists seem to have accomplished the most. The method followed by the Illinois and Colorado commissions of choosing a director and staff to make critical studies of various branches of administration upon which to base final recommendations carries more weight with legislatures and does more to educate the public. The extreme example of the methods which a commission should avoid is that of the members of the Kansas committee, who at their first meeting emulated the Second Triumvirate by dividing the realm into three parts; each member then conducting an independent survey.

The creation of a widespread demand for better administration should be unquestionably one of the chief objects of a state economy and efficiency commission. In fact, the chief contribution of such commissions thus far has no doubt been in this direction. Legislatures and state officials have known for a long time the need of administrative reform in state governments. But a political appeal on such grounds has seldom been made and still more infrequently heeded. Less than a decade ago, it would have been a courageous candidate for governor who would have

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made a campaign issue of the need of administrative reorganization and a state budget system. Yet such an appeal was made in a large number of states at the elections of 1916 and in many cases success attended the attempt. The governors' messages of 1917 teem with demands for administrative reorganization. Reports from the states where the more effective work was done by reorganising agencies, tell of an increased public interest in governmental efficiency. Unquestionably the reformation of state government is now more widely demanded than ever before.

It is patent that the largest measure of success in securing actual legislative relief has been in proportion to the understanding of existing conditions shown by the commission and its realization of the limitations of the ordinary legislature. For this reason it is perhaps significant that the most fruitful results come from bodies made up entirely of members of the legislature. The temporary commission which sets out to offer concrete recommendations limited by and adjusted to actual conditions, and which has a first hand knowledge of the legislature has thus far been the most serviceable to the cause. The ordinary legislator cares little for sweeping plans of administration or logical precision in reorganization. He gives his first allegiance to the tangible and workable. That the efficiency and economy movement is destined to continue is indicated by the creation of a number of new commissions since the beginning of 1917. That the new ones will profit by the experience of the earlier commissions is likely. If this volume assists in showing how to avoid the pitfalls and how to attain more effective reforms it will accomplish its purpose.

## APPENDIX

### BIBLIOGRAPHY OF EFFICIENCY AND SCIENTIFIC MANAGEMENT IN GOVERNMENT

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## PREFATORY NOTE

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It is no disparagement of other American cities to say that New York has taken the leadership in budget reform during the last ten years. Perhaps most students of municipal government would concede without question the proposition that no other city has come so near to the ideal both as regards the form of the budget and the process of making it. All over the United States, directors of bureaus of municipal research, many of them trained in the Training School for Public Service, are putting into effect budget practices developed in New York City. Financial officers from widely scattered centres have sought to improve their local affairs by studying the experience and methods of this city. Even from the Orient, students have come to observe at first hand the operations of the most gigantic fiscal machine among all the cities of the New World. One of these, a Chinese, has published, mainly for the use of his countrymen interested in municipal progress, an illuminating account of his observations. Among the residents of the city itself there is a widespread confidence that the finances of the municipality are established on a sound basis and honestly administered. Not a little of this confidence, it is safe to conjecture, is due to a belief that recent progress in budget making has been along lines tending to clarity, simplicity, and accountability in the conduct of public business.

If all this is true, then the time has come to take stock of New York City's experience. An accurate and unbiased record of development during the last decade ought to serve as a guide to the future, except for those who may ascribe perfection to the present instruments and methods. It should satisfy the legitimate curiosity of those who are anxious to know just what concrete reality lies behind the flood of literature and rumors about New York City's progress in fiscal practices. It should be a contribution to the upbuilding of the science of budget making in the United States—a science that is just in its infancy, notwithstanding all of the "experts," real and sham, who have flourished as a result of the awakened public interest in this subject. Finally it should be of real value to those students and

men of affairs in other cities who have long looked to New York, and not improperly, for leadership and direction in the management of public business.

It was under these circumstances that the author of this study, Mr. Arnold W. Lahee, was assigned to the task of describing, in a purely scientific manner, the methods used in making the budget of New York City and the nature of that instrument as it has been developed under the stress of recent interest and criticism. Mr. Lahee has many excellent qualifications for the enterprise. He spent two years in the graduate school of Harvard University, specializing in economics and finance. He was for more than a year a student in the Training School for Public Service, connected with the New York Bureau of Municipal Research. For several months he was on the staff of the New York State Senate Committee on Civil Service and during that period he had an exceptional opportunity to examine at first hand the relation of civil service provisions to budget-making practices and problems. He is not, it is true, a professional accountant, but this is no disqualification for the work in hand. He is not concerned with highly technical accounting processes, but rather with the budget as it involves public authorities who are not experts and citizens who are interested in practices that lead to democratic control and responsibility in government.

The method followed by Mr. Lahee in the preparation of this work was that of the careful and critical reporter of facts. He first prepared himself by a study of the available literature on the subject. He then followed the budget-making process during the summer and autumn of 1916, attending the public session held by municipal officers and authorities. Through the courtesy of innumerable city officers, he was also able to gain access to meetings and documents not generally accessible to the public and he was given advice and counsel on innumerable points in general and detail. He also had access to that veritable mine of information on New York City's progress in budget making—the files of the Bureau of Municipal Research. Thus equipped and with these opportunities before him, Mr. Lahee devoted himself with unremitting zeal to the task of giving to the citizen an intimate account of the actual budget-making process in the City of New York. Of the quality of his achievement, it is hardly necessary to say anything here. The pages of his study speak for themselves; but it seems not amiss to set down here in short form, for the benefit of those who have little time to plough

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through the mass of data which Mr. Lahee has assembled, the significant results of his labors.

No one can turn over these pages, even casually, without discovering how arduous and technical is the task of making the budget of New York City. Leaving out of account all of those knotty questions of public policy involved in determining what shall be the trend of public expenditures, and directing the attention solely to the problem of providing for needs now recognized by law we can readily see how complicated is the enterprise. Supplies and materials almost infinite in variety and number must be bought. Specifications must be set and the vagaries of the market unearthed. Human services of every class, from the lowest grade of casual labor to the high skilled technician must be engaged and paid for in such a manner as to secure loyalty and good work. Such matters do not call for budget speeches like those which made Gladstone the envy of statesmen of every nation, but for technical knowledge, practical skill, business judgment, and sober good sense. In all this there is little that is dramatic or that offers materials for exciting public enthusiasm. Budget making in detail calls for skill in all of the sciences of good management.

It is evident from Mr. Lahee's record, that the government of New York City has, during the last ten years, addressed itself with much emphasis to the problem of providing the agencies for developing expert information about the problems of appropriation. Indeed, we may truly say that the most striking feature of the decade of progress here described is the creation of highly specialised staff agencies in the government of the city, charged with the duty of studying continuously the problems of buying and using materials and services. These agencies are the bureau of contract supervision, the bureau of personal service, and the committee on education which are organs of the real appropriating authority, the board of estimate and apportionment, and in addition the bureau of municipal investigation and statistics attached to the office of the comptroller, and the commissioners of accounts connected with the Mayor's office. These are staff agencies in the strict sense of that word. They are not charged with the performance of line duties, but with the study and investigation of work done or to be done. The first three agencies are really budget-making bureaus, and the other authorities may be used in that connection wherever required by the superior officers. In other words, budget-making progress in New York has been

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marked by the creation of specialized divisions of the government entrusted with the responsibility of giving to the appropriating authorities sound advice and counsel on all points of expenditures. The budget for any specific department is no longer the mere result of higgling between the department chief and a "must-be-convinced" committee of the appropriating body.

The second striking feature of budget progress here recorded has been the transference of budget making in the first instance from the nominal authority, the board of estimate and apportionment, to a committee of the board, and from this "main committee" to a subcommittee, composed not of members of the board, but of their personal representatives, employees of the city, more or less expert in the infinite details of the budget. We may say that the greater part of the New York City budget is determined by necessity and that the details of that part are settled by adjustments made by the staff agencies of the board of estimate and apportionment, the subcommittee of that board, and the heads of departments. The little that is left for adjustment after the subcommittee has completed its work is determined by the main committee of the board. The board itself, which theoretically makes the budget, as a formal organization merely delivers eulogies over a *fait accompli*.

This development of special staff agencies for budget making and this transference of preliminary authority to a remote subcommittee have important administrative results. Nominally most of the great departments of the city are "mayor's departments." At all events the mayor appoints and removes the heads and is, in public view, responsible for their conduct. Through the development of special agencies, the board of estimate and apportionment has won a control over the detailed expenditures of the mayor's departments, and over the day to day uses of money that cuts away in fact if not in theory an immense amount of the power which the mayor is supposed to possess and exercise. Whoever controls expenditures to an infinite degree also determines policies in a great measure. This, however, is a collateral issue,—important no doubt, but one with which we are not primarily concerned here.

A third important feature of recent budget-making progress is the decline of interest in "the great public hearing on the budget," of which much has been written. The period set by law for the taxpayers' drive on the budget is a waste of time, so far as effects on the appropriations are concerned. The ceremonial is as futile

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as the summoning of the minority members of the committee on ways and means after the majority have decided on the schedules of a tariff bill. A study of the actual practice reveals that those organisations, citizens, and civil servants desirous of bringing real pressure to bear on the budget-making process are given their days in court by the subcommittee and the main committee while schedules are still flexible and real light on expenditures is informing and useful. When the bond is for all practical purposes signed and sealed, it is without avail for any of the parties concerned to deliver orations on the justice or injustice of the provisions. Of course, it is possible that legitimate political purposes may be served by dramatics at the public hearing, but these are so intangible that it is impossible to evaluate them. For the ordinary citizen to attempt to enlighten the board of estimate on the highly technical details of the budget is, to say the least, somewhat amusing.

A fourth significant feature disclosed by Mr. Lahee's study is the development of technical devices to check the corrupt expenditure of money by department heads,—the use of money for purposes other than those intended by the appropriating authorities. This is done by the extensive segregation of items of expenditure and the establishment of auditing supervision in the comptroller's office. From the point of view of simple *honesty* in the city government, this is probably the great achievement of the last decade. The spending officer is told how much money he can spend and for what objects he can spend it in detail and the comptroller holds him to the book. This does not necessarily mean wise expenditure or economical expenditure. Segregation and control are the product of a search for financial honesty in municipal administration. The millions of dollars to be spent are all set forth in minute sums in the budget. The citizen can see them there. The comptroller holds the department heads rigidly to the items and the taxpayer, if he will take the trouble, can see the vouchers and other documents which record *expenditures according to law*. The American faith in the voucher is almost pathetic, but it is in a way justified—by experience with the disastrous practices which arose under the system of uncontrolled lump-sum expenditures.

It has been said that "the hand is subdued to the dye in which it works." This is true. So budget reform bears the imprint of the age in which it originated. Wearied of the continued story of public expenditures for corrupt purposes designed to serve

the ends of the political machines, citizens demanded an *accounting*. This is literally what they got. Mr. Lahee records the history of the movement. When the New York Bureau of Municipal Research was established it called upon expert accountants to aid in devising better budget procedure. As Mr. Lahee remarks: "The first effort toward improvement aimed to follow the lines laid out by the examiner from Haskins and Sells. It consisted of an attempt to subdivide appropriations by functions, according to groups or lines of activities, the aim being to form a basis 'of specific agreement between the appropriation authorities and administrative heads to spend money allotted to them for the purposes indicated in the budget statement.' . . . Classification [of expenditures] by object lends itself to standardization of accounting procedure, while grouping on the basis of functions must differ in every department. At a time when one of the chief criticisms of the budgetary system was its chaos, there was naturally a leaning toward that basis of classification which promised greater uniformity and order."

That segregation of items and classification of expenditures by objects constituted a great advance over old practices cannot be denied. Coal of a given kind is coal of a given kind whether it is used by the health department to heat institutions or by department of charities to fire boilers on its boats. In expenditures for specific objects one department may be checked against another. The great disparities which once covered corrupt uses of funds become increasingly difficult to cover up. Uniformity of accounting is facilitated. Standards may be introduced which act as checks on dishonest officials. In order to indulge in corrupt practices it is necessary to have collusion among the appropriating authorities, the department heads, and the comptroller. All this technical advance in New York City has undoubtedly made for direct public control, for closer analyses of their expenditures by departmental chiefs, and for *honesty* in the use of public funds. This is not to be doubted. How far it hampers the upright official and leads to innocent waste of funds is another matter. But new economies in management are to come not from a return to old practices but from advances made from the points now gained.

In the development of agencies for gathering the highly specialized information upon which wise budget making must be based and in the establishment of appropriating and accounting methods which facilitate the honest expenditure of public funds, New York City has undoubtedly made immense gains. It has accom-



plished the intensely practical result of rendering almost impossible the corrupt practices in expenditures that once disgraced the city government—corrupt practices which were in the main responsible for the decade of budget reform described by Mr. Lahee. This is a record of which those administrations and citizens responsible for the gains may justly be proud.

While gratefully recording these signs, it will not seem unduly critical to suggest that New York City has not yet perfected the technique of budget making and that more light may yet break in upon this subject. The specialized agencies for developing information as to the details of the budget are undoubtedly permanent but so much cannot be said for the highly itemized act of appropriation. That feature of the budget, as remarked above, is the product of a quest for honesty in the expenditure of public funds, not for efficiency in administration. Given an honest administrative officer it is not necessary to tie his hands so closely. Indeed if he is extremely zealous in the discharge of his duties he is likely to become, in a sense, dishonest, in his efforts to bend the highly itemized schedule of appropriation to the fluctuating needs of his office. If we can by some process secure responsibility and honesty in the management of public business, the extremely segregated budget will drop into the background. Itemisation will simply be the process used by the administrative officer in calculating the probable needs of his department and in setting forth the uses of moneys placed at his disposal in the past. His proposed items, as modified by the appropriating body, will become mere tentative schedules to be followed only in so far as the conditions of administration which they forecast do not essentially change. Extreme itemisation in the act of appropriation is therefore not a permanent feature of budget making unless we are to assume that the old days of corruption in public expenditures are likely to return.

We have said that the special agencies for developing technical information about budget details give promise of permanency. No one can spend a few days over the infinite details of the New York budget without realizing that a return to budget making by a committee of the board of estimate whose members are loaded down with other public business is impossible, but this is not without its dangers and disadvantages. These special agencies, by their mastery of the minutiae of the budget, become the real makers of that instrument, at least in a large part. The main committee of the board of estimate cannot reopen and reconsider

all of the petty matters closed by the subcommittee, the department heads, and the examiners for the staff agencies. It must perforce accept nearly all, if not all, of their conclusions—conclusions which in the aggregate constitute substantially all of the budget. Responsibility for details of the budget no longer rests in fact upon elective public officers in New York City. By the slow accretion of custom budget making has passed from the nominal authorities to a subcommittee, not even composed of members of the board of estimate and apportionment, working in close co-operation with specialist examiners.

No machinery is provided for halting the procedure and fixing the attention of elective officers and the citizens upon any group of details. The meetings of the subcommittee while probably open to anyone interested are not calculated to excite public concern, and yet at those meetings are determined the elements of the budget which the board of estimate will later ratify. The board of aldermen occupies, in this regard, a pitiful position. It has no information until the work is done. It is true that the recently enacted Foley bill provides for placing the departmental requests in the hands of the board of aldermen and for some slight checks on the board of estimate. This is at best only a slight gain. The so-called public hearings on the budget are a farce as now conducted. If elective officers and citizens are to have any influence on the budget, that influence should be brought to bear while the details are under consideration. The delivery of an oration on the magnitude of the budget at a taxpayers' hearing may be gratifying to the orator, but it is a waste of time. The budget can be influenced only in the consideration of details and no one can discuss those details unless he has specialized information about them.

From the point of view of citizen democracy, our budget procedure in New York City is about as follows:

1. The heads of departments bring in their estimates.
  2. Examiners from the staff agencies of the board of estimate and apportionment make highly specialized inquiries into details—salaries, wages, and cost of materials, infinite in variety.
  3. A subcommittee of the board of estimate and apportionment reviews the departmental estimates, with the aid of the heads and the staff examiners, but this subcommittee is not composed of members of that board. It is made up of personal representatives of certain members of that board—able specialists, no doubt, but not responsible public officers.
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4. The main committee of the board of estimate, really composed of members of the board, reviews the consolidated budget as prepared by the subcommittee accepting substantially all of the recommendations, but making minor changes.

5. The board of estimate and apportionment solemnly "makes" the budget by ratifying the work already done.

6. The board of aldermen is handed the completed budget. If the board of aldermen is in harmony with the mayor and the board of estimate, it will doubtless present a highly gratifying address on the excellence of the budget for the coming year. If it is out of harmony with the budget-initiating authorities the dissenting members will deliver stump speeches which cannot possibly affect the final results. If the opposition had, it is true, a majority sufficiently large to pass items over the mayor's veto, some amusing diversions might arise, but this does not need to be considered. After the members of the board of aldermen have declaimed about the budget, the mayor scolds them and the act of appropriation prepared in the main by a wholly irresponsible group of specialists becomes law.

Surely this is not a dignified or an edifying spectacle. If the board of aldermen is to have any power at all, if it is to be permitted to strike out items and to deliver speeches, why not make it assume some responsibility? If the members of that board were required to put their minds upon the infinite details of the budget while it is in the tentative stage, they would have then to say something that is relevant, hold their peace, or appear ridiculous. Whoever would alter the budget must alter details. Whoever would alter details must know something about them. If the board of aldermen had before it the tentative consolidated budget early in the autumn and really desired to exercise some influence on the budget it would be compelled to bring informed opinion to bear on various points of detail. It could thus educate itself, and the budget-making authorities. At all events it could have its say at a time and in a form that would count for something. It could not merely deliver a spiteful address at the end of the budget season. It seems reasonable, therefore, to suggest that the board of aldermen be given at least some critical power over the budget or that the present farce be abandoned.

At all events there should be open and critical consideration of the budget by some elective authority. The members of the board of estimate and apportionment are so loaded down with administrative duties and the budget of the city considered in its

aggregate of details, is such a staggering affair, that budget making has passed almost entirely into the hands of specialists who assume no public responsibility for their acts. This is then the supreme question presented by Mr. Lahee's study: "Do we want a budget initiated by administrative officers and critically reviewed and determined by popularly elected authorities whose fundamental business it shall be to formulate a budget and assume responsibility for it before the voters of the city?" If so, then we need some very radical changes in the charter of New York City. A budget of more than two hundred millions is surely a matter of citizen concern as well as a technical instrument of government.

A great deal may also be said legitimately in the way of criticism about the *form* of the New York City budget. Strictly speaking it is no budget at all but an highly itemized act of appropriation. It does not contain by any means all of the expenditures for the year which it covers. It presents no balance sheet. Surely no citizen would think that he had completed his household budget if he figured out his expenditures to be covered by his salary or current income and omitted expenditures to be covered by borrowing; or if he calculated his expenditures and gave no consideration to his sources of revenue. No citizen would think his personal finances on a sound basis if he should lightly begin for this year or next a new line of expenditures which would a few years hence involve him in commitments of three, four or five times the sum. This may seem to some a captious criticism but it is not. If a budget is to be a matter of public information then it should be a true budget containing a retrospect, a picture of present conditions, and a forecast of finances on a balance sheet basis.

Of course an accountant will say that all of the facts can be discovered at the comptroller's office. True, perhaps, but certainly not with ease. Nowhere in New York City is to be found a clear and accurate presentation of finances such as the Chancellor of the British Exchequer opens before the House of Commons in his budget speech. In that document, which is nothing but a small folder, is to be found a record which gives the citizen genuine information as to the present state of finances, current tendencies, and burdens of taxation. The New York City budget gives no such information. One could study all of the budgets for the last ten years and know precious little about the total expenditures of the city, the gross commitments, and cumulative respon-

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sibilities. In this respect the little towns of New Jersey, under the recently enacted Pierson law, will soon be ahead of New York City. But it is not necessary to have legislation in order to develop a genuine budget in New York City. Let the appropriate authorities take the modest British budget leaflet and reduce the finances of the city to the plan contained therein.

But a note of criticism should not close this introduction. We have made great gains in budget making in New York City during the past ten years. Our departmental officers have been forced to think of their administrative work in terms of minute details of expenditure. This is a wholesome thing in itself. Whoever administers without reference to costs is a dangerous administrator. The dark corners of the great budget have been shot through with daylight. Some "jokers" may slip through, but the unexplored lump sums that were once the politician's joy and the taxpayers' grief are to be found no more. Waste there may be; inefficiency there may be; but *honesty* has been in a large measure institutionalised. Nothing short of a revolution can carry us back to "the good old days." And yet it is no disparagement of the task that has been done to say that having put our hands to the work we should look forward to perfecting the content of the budget and to the development of a procedure that will call for more critical consideration and more open responsibility on the part of elective officials.

CHARLES A. BEARD.

TRAINING SCHOOL FOR PUBLIC SERVICE  
JULY 7, 1917.

PART I  
DEFINITION OF THE NEW YORK CITY  
BUDGET

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CHAPTER I

CONTENT OF THE BUDGET

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*The Official Budget*

The New York City charter provides that the budget for each year shall be published in the *City Record* sometime prior to December thirty-first. The budget so appearing is *the official budget*. Besides this publication, it is customary, for the sake of greater convenience in handling, to print copies of the budget in volume form.

The official budget consists of the following distinct parts:

1—The resolution or act of appropriation (so designated in the 1917 budget) couched in the following terms:

*Resolved*, That, pursuant to the provisions of section 226 of the Greater New York Charter, the Board of Estimate and Apportionment makes this, the budget of the City of New York for the year one thousand nine hundred and....., the total amount appropriated being:

First: The amounts estimated to be required to pay the expenses of conducting the public business, and to meet the debt charges of said City of New York for the year one thousand nine hundred and.....

Second: The amount estimated to be the deficiency on January 1, 19—, in the product of taxes heretofore levied, deemed to be uncollectible and not otherwise provided for, as required by Chapter 209 of the Laws of 1906, being Section 248 of the Greater New York Charter

Third: The amounts estimated to be required to pay the charges and expenses of the Counties of New York, Bronx, Kings, Queens and Richmond, for the year one thousand nine hundred and.....

2—Terms and conditions under which the budget is to be administered.

3—A statement of the appropriations.

4—A statement of the reductions, if any, proposed by the board of aldermen.

5—A statement of the action of the mayor, if any, in vetoing any of the reductions recommended by the board of aldermen.

The budget up to the action of the board of aldermen is signed by all the members of the board of estimate and apportionment,

and the entire budget including the modifications by aldermen and mayor, is certified in accordance with the charter<sup>1</sup> (sec. 226) by the mayor, the comptroller, and the city clerk.

*The "Supporting Schedules"*

The budget as printed in volume form generally includes certain features in addition to the above. The most important of these is a section which gives, besides the "skeleton budget," or official statement of appropriations, itemized tables called "supporting schedules." These supporting schedules specify, for personal service, the actual positions, designated by title and salary rate, which are the basis of the appropriation. Thus, for instance, appropriation number 1115 (1917 budget), amounting to \$7260.00, is based on a schedule consisting of a—

Supervisor of Recreation . . . . .	\$3,420.00
Director . . . . .	1,500.00
Head School Farm Attendant . . . . .	1,200.00
Assistant Supervisor of Play (female) . . . . .	1,140.00
	\$7,260.00

Appropriations other than personal service are not often scheduled, except "contract and open order service."

This section with supporting schedules, although not properly part of the official appropriation statement, is made fully as binding (so far as the department heads are concerned) through the governing "terms and conditions." It is therefore treated as a part of the budget. Indeed, in the volume publication of the 1917 budget, the "skeleton" or official budget has been left out entirely in order to economize in printing, and the appropriations with the supporting schedules have been published in its place and represented as duly signed by the board of estimate and apportionment.

Besides the section with the supporting schedules, certain subsidiary statements not really connected with the official budget are printed from year to year. Since 1912, for instance, summaries of the appropriations have been presented in tabular form. Since 1914, this summary has been printed before the main budget.

<sup>1</sup>"Prior to December twenty-fifth in each year, the budget, as finally adopted pursuant to the provisions of this section, shall be certified by the mayor, comptroller and city clerk, whereupon the said several sums shall be and become appropriated to the several purposes therein named." (Charter, sec. 226.)

*Appendices Published with Budget*

Other tables are printed as appendices, No less than eighteen of these appeared in the 1917 budget, as follows:

- Appendix A—Statement of Special Revenue Bonds Allotted During the Year 1916
- Appendix B—Analysis of Rent Appropriations for 1917 for City and County Departments and Offices
- Appendix C—Summary Table of Bonds Maturing in 1917, Showing Provisions for Redemption and Amount of Annual Installments Provided for Redemption
- Appendix D—Summary Table of Interest Payable in 1917 on the Bonded Indebtedness, Showing Sources from Which Such Interest is to be Derived and to Whom it is Payable
- Appendix E—Summary Table of Interest Payable in 1917 on the Bonded Indebtedness, Classified According to Purpose for Which the Bonds Were Issued
- Appendix F—Summary Table of Interest Payable in 1917 on the Bonded Indebtedness, Classified According to the Rates of Interest
- Appendix G—Summary Table of Interest Payable in 1917 on the Bonded Indebtedness, Classified According to Purpose for Which Bonds were Issued; Also Sources from Which Interest is to be Derived and to Whom it is Payable, and Further Classified According to Rates of Interest
- Appendix H—Comparative Statement of "Debt Service" Requirements, Provided for in Budget of 1916 and 1917
- Appendix I—Table Showing Condition of the Tax Levies of the Years 1905 to 1915, Inclusive
- Appendix J—Statement Showing Losses and Gains in Tax Levies of 1905 to 1915, Inclusive
- Appendix K—Statement Summarising the Financing of the Annual Budgets of 1905 to 1915, Inclusive
- Appendix L—Statement Showing Condition of Annual Budgets of 1905-1915, Inclusive
- Appendix M—Statement of Special Revenue Bonds Issued in 1915 and 1916, Redeemable in 1916 and 1917
- Appendix N—Summary Statement Classifying the Revenue Receipts of the "General Fund for the Reduction of Taxation" During 1914 and 1915
- Appendix O—Summary Statement Classifying According to General Source, the Revenue Receipts of the "General Fund for the Reduction of Taxation" During 1914 and 1915
- Appendix P—Supplement to Principal Statement Classifying the Revenues to the General Fund from Permits, Licenses, Privileges, etc.
- Appendix Q—Statement Summarising the Operations of the "Sinking Fund for the Redemption of City Debt No. 1"
- Appendix R—Statement Summarising Surplus Revenue Receipts to "Sinking Fund for the Payment of Interest on the City Debt"

*Development of Content of the Budget (As Published in Volume Form)*

The development of the budget as published in volume form during the past twelve years may be seen at a glance from the following table. The various parts are checked for each year if they appear in the budget for that year.



THE NEW YORK CITY BUDGET

PARTS OF BUDGET	'17	'16	'15	'14	'13	'12	'11	'10	'09	'08	'07	'06
Summary . . . . .	✓	✓	✓	✓	..	..	..	..	..	..	..	..
Budget proper												
Act of appropriation . . . . .	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Terms and conditions . . . . .	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Appropriation amounts . . . . .	†	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Signature bd. of estimate . . . . .	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Action bd. of aldermen . . . . .	✓	✓	✓	..	✓	✓	✓	✓	✓	✓	✓	✓
Certification . . . . .	✓	✓	✓	..	✓	✓	✓	✓	✓	✓	✓	✓
Appropriations with supporting schedules . . . . .	†	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Appendices . . . . .	✓	✓	..	..	✓	✓	..	..	✓	✓	✓	✓

\* "All appropriations for supplies and contingencies made in the foregoing budget are subject to transfer of such appropriation amounts that may be necessary to provide for one or more telephone contracts for general use, if the board of estimate and apportionment determines to enter into such general contracts." (This note was inserted after the appropriation amounts and before the signature of the board of estimate and apportionment.)  
 † As already noted above, the appropriations with supporting schedules in the 1917 budget take the place of the appropriation amounts unsupported by schedules which have been omitted altogether.

It will be seen that the act of appropriation, appropriation amounts, and the signature of members of the board of estimate, are the only items which have been retained uniformly throughout the entire terms. Terms and conditions have formed a part of the budget regularly since their introduction in 1909. The report on the action by the board of aldermen and the signatures of the mayor, comptroller and city clerk, also introduced in 1909, were omitted in 1914 only—whether by accident or not, we cannot say. A summary of expenditures has been included since 1912. In that year and the following it consisted simply in a restatement of appropriations in the form of a table and was located, as an appendix, at the end of the volume. Since 1914 the summary has served a distinct purpose, to group all expenditures into the broad divisions of governmental activity, and has preceded the budget proper. The first appendices appeared in 1908 and 1909, when tables were given comparing appropriations for the given year with those of the preceding year, to show increases and decreases. In 1916, two tables appeared as appendices which were retained in 1917:

- A—Statement of Special Revenue Bonds Allotted During the Year 1915
- B—Analysis of Rent Appropriations for City and County Departments and Offices

## CHAPTER II

### CONTENT OF THE APPROPRIATION STATEMENT

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The budget proper relates exclusively to appropriations made, or money to be spent, out of the tax levy and certain other special funds known collectively as the "General Fund."<sup>1</sup> It is the operation or "housekeeping" account of New York City. In the words of the Charter (sec. 226): it represents "the amounts estimated to be required to pay the *expenses* of conducting the public business of the City of New York, as constituted by this act, and of the counties of New York, Kings, Queens and Richmond for the then next ensuing year."

Included in the budget,<sup>2</sup> therefore, are:

- 1—Operating expenses, including rent
- 2—The greater part of the interest on bonds
- 3—A portion of the redemption of the public debt
- 4—Contributions, state taxes, and tax deficiencies

Not included in the budget are most expenditures for works of construction, "capital outlays," bonds or stock to be redeemed by revenues from self-supporting activities, and so on.

While the budget, strictly speaking, includes only appropriations which are to be met by the tax levy, supplemented by certain special revenues, there will be found printed in the text items to be paid out of other funds. In the 1917 budget, for example, are sums under the heads of "corporate stock," "special and trust funds," the "fund for street and park openings," the "revenue bond fund," the "water revenue fund," and the "bridge fund." Thus, as the "summary of appropriations" for the president of the Borough of Brooklyn, the following table is given:

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<sup>1</sup> See pages 50 and 51, financial summary for year ended December 31, 1916, department of finance. For 1916, \$176,650,500 was paid out of the Tax Levy, and \$37,996,936.34 out of the General Fund Revenues.

<sup>2</sup> This is merely a general statement and makes no pretense at detailed accuracy. No complete and clear-cut statement exists of exactly what is included and what not included in the budget. Even if a trained accountant produced such a statement, changes from year to year would soon render it out of date.

THE NEW YORK CITY BUDGET

	TOTAL	TAX LEVY	CORPORATE STOCK	SPECIAL AND TRUST FUND	REVENUE BOND
Personal service . . .	\$1,969,621.74	\$1,515,980.50	\$287,283.94	\$162,757.30	\$3,600
Supplies . . .	99,350.00	99,350.00			
Equipment . . .	36,186.00	36,186.00			
Materials . . .	190,200.00	190,200.00			
Contract or open order service . . .	331,780.50	278,720.50	5,760.00	47,300.00	
Contingen- cies . . . . .	14,729.00	14,729.00			
Departmen- tal total . . .	\$2,641,867.24	\$2,135,166.00	\$293,043.94	\$210,057.30	\$3,600

Only the amount stated under "Tax Levy," however, \$2,135,166.00, enters into the sum formally appropriated in the budget.

The purpose of inserting among the appropriations amounts not to be included in the budget proper (a practice begun in the 1912 budget), was to establish a control over the personnel of departments which was to be paid out of funds other than the tax levy fund. In other words, it made possible a complete list of the personnel where only a part was to be supported by tax levy funds. Control has been extended occasionally to other than personal service, more especially in "contract or open-order service." But the procedure followed for the actual appropriation of these other funds is entirely separate and distinct from the "budget procedure" to be hereinafter described.

In the 1917 budget such statements of expenditures to be made from other funds occur in eighteen departments, as follows:

**CONTENT OF APPROPRIATION STATEMENT**

DEPARTMENT	PAGE	CORPORATE STOCK	SPECIAL AND TRUST	STREET AND PARK OPENINGS	REVENUE BONDS	WATER REVENUE	BRIDGE REVENUE
Finance	18		Personal				
Law	22			Personal			
President Manhattan	35	Personal	Personal Supplies Equipment Materials Contract				
President Bronx	38	Personal		Personal Supplies Materials Contract			
President Brooklyn	37	Personal Contract	Personal Contract		Personal		
President Queens	68	Personal Contract	Personal Contract				
President Richmond	78	Personal	Personal Contract				
Education	93	Personal					
Parks Bronx	105	Personal					
Parks Brooklyn	107	Personal					
Parks Queens	112	Personal					
Fire	118	Personal					
Armory Board	126	Personal					
Health	133	Personal					
Water, Gas and Electricity	218	Personal				Personal Supplies Equipment Materials Contract Contingencies Fixed Charges	
Correction	249	Personal					
Plant and Structures	258	Personal					Personal Supplies Equipment Materials Contract
Docks and Ferries	270	Personal					

**Mandatory Charges**

Finally, not all appropriations included in the New York City budget proper are under the control of the city authorities. About 50 per cent<sup>1</sup> of the total appropriations is outside of the power of the budget makers of New York City to increase or to decrease. Of this amount, 33 per cent represents amortisation charges; the remaining 17 per cent is either fixed by law or the power of fixation is conferred upon officers other than budget makers. About 7 per cent more is partly mandatory, leaving only about 43 per cent or so of the total budget to the discretion of the controlling authorities.

<sup>1</sup> These figures are taken from a report on "the Effect of Mandatory Legislation upon the Budget for the Year 1915" by the commissioner of accounts, June 15, 1915. They are therefore only approximate.

*THE NEW YORK CITY BUDGET*

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Of the mandatory charges approximately 73 per cent falls to the department of education and 14 per cent to county offices.

Although no further reference will be made to these mandatory charges, it will be understood that the following description of budget procedure, etc., refers to that part only of the budget which is under the control of the budget-making authorities.

## PART II

### NEW YORK CITY BUDGET PROCEDURE

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#### CHAPTER I

#### STEPS IN NEW YORK CITY BUDGET MAKING

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##### *Summary of Procedure*

The procedure followed in making the New York City budget may be summarized briefly as follows:

At the outset, preliminary estimates of the amount of money necessary to maintain the several departments and divisions of the city government must be formulated. This duty naturally devolves upon the heads of the main organization units.

When the estimates are completed, they are turned over to the board of estimate and apportionment (composed of the mayor, comptroller, president of the board of aldermen and the five borough presidents) which, among its other financial duties, is responsible for preparing the budget.

In order to expedite its business, the board has established standing committees of its own members to attend to particular functions for which the board as a whole is responsible. Such committees are, for example, the committee on franchises, the committee on the city plan, on salaries and grades, on markets, etc. To its "committee on the tax budget" is assigned the task of preparing the budget. This undertaking has developed to such proportions, however, that several other agencies have been brought into play.

In the first place, a detailed scrutiny of the estimates is made by expert examiners of the bureau of personal service (until 1917, known as the bureau of standards), the bureau of contract supervision and the staff of the committee on education. These bureaus also receive assistance from the bureau of municipal investigation and statistics and the office of the commissioner of accounts.

As one might suppose, innumerable differences of opinion arise between the examiners and department heads whose estimates are being subjected to critical review. Such differences

must be adjusted, of course, before the budget is completed. The preliminary settlement of these differences is entrusted in the first instance to a subcommittee composed of representatives of the committee of the board, or the "main committee," and of the examining bureaus. The subcommittee is merely advisory, with no power of ultimate decision, and is also limited in action by rules imposed upon it by the board of estimate and apportionment. Cases outside its jurisdiction and others where the department head is dissatisfied with its decisions are brought up in the form of appeal to the main committee.

The tentative budget embracing both the decisions by the subcommittee and those made by the main committee is submitted to the board of estimate and apportionment as a whole. The board in turn makes many adjustments and decisions of its own. Before the board finally adopts the budget it is published and "taxpayers' hearings" are held to give the public opportunity to offer suggestions.

The budget as passed by the board of estimate and apportionment is next sent to the aldermen, who turn it over to their finance committee. The finance committee makes an investigation on its own account—holds a number of hearings, consults with department heads and sometimes calls in members of the board of estimate and apportionment to account for particular appropriations. It finally embodies its recommendations in the form of a report read before the board as a whole. The aldermen vote upon these recommendations, their action being confined to the reduction and elimination of items. The aldermen have no power to make any increase in the appropriations submitted by the board of estimate and apportionment.

The budget as amended is returned to the mayor. If he exercises his power of veto, the items are reconsidered by the board of aldermen, who may pass their own recommendations over the mayor's veto by a three-fourths vote.

The budget is finally certified by the mayor, comptroller and city clerk.

## CHAPTER II

### PREPARATION OF PRELIMINARY ESTIMATES BY DEPARTMENT HEADS

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#### *Charter Requires Department Heads to Submit Estimates*

For the preparation of the preliminary estimates, the department heads and other high officials are, of course, held responsible. They are responsible for the administration of their departments and divisions, and consequently should have the clearest understanding of the problems to be met in their particular fields, the phases of the work which need development, the cost of administration and kindred matters. The charter provides, therefore, that "the presidents of the several boroughs, the heads of departments, bureaus, offices, boards and commissions shall . . . send to the board of estimate and apportionment an estimate in writing, herein called a departmental estimate, of the amount of expenditure . . . required in their respective departments, bureaus, offices, boards and commissions. . . ." (Sec. 226). The detailed work entailed in the preparation of estimates, however, is generally entrusted to subordinates. The greater part of the estimates of appropriations needed for the ensuing year is based upon the expenditures of the preceding and the present year, the more important matters only coming under the attention of the department heads themselves. However, there are some department heads who themselves attend to every detail of their estimates, and who take pride in being able to justify every single item from their own firsthand knowledge of the circumstances.

#### *Period of Preparation*

The date for beginning the preparation of budgetary estimates in the departments is not fixed. The department head uses his discretion in the matter. Some of them maintain a regular study of budget problems from month to month. Commissioner Fetherston of the street cleaning department, for example, makes the process continuous from one year's end to the other—the ideal of budget procedure. Other department heads find their financial duties disagreeable and burdensome. They postpone the task to the last minute, and generally until after the last minute. Continual pressure is necessary to force them to com-



ply with regulations, for the date for submitting the estimates to the board of estimate and apportionment is fixed.

The charter stipulates<sup>1</sup> that the departmental estimates must be submitted by August first:

"In order to enable said board to make such budget, the presidents of the several boroughs, the heads of departments, bureaus, offices, boards and commissions shall, not later than August first, send to the board of estimate and apportionment an estimate in writing, herein called a departmental estimate, of the amount of expenditure specifying in detail the objects thereof, required in their respective departments, bureaus, offices, boards and commissions, including a statement of each of the salaries of their officers, clerks, employes and subordinates."

The former date, September tenth, was found by the board of estimate and apportionment to be too late to allow adequate examination of the estimates. Inasmuch as the charter has given it the power to fix the terms and conditions governing departmental estimates,<sup>2</sup> the board attempted to shift the date further and further back. In 1910 the department officials were requested to complete their estimates by August first.<sup>3</sup> In 1914, the mayor issued an order to the heads of departments under his jurisdiction—those appointed and removable by him—to submit their estimates to him by July first. The next year the board of estimate followed his example and made the date July fifteenth.<sup>4</sup> In 1916, owing to the passage by the state legislature of a bill which would have amended the Greater New York Charter by advancing the date for the collection of taxes, a resolution was adopted by the board as a whole to set the date at June first.<sup>5</sup> When the governor vetoed the proposed amendment the date was again changed to July first.<sup>6</sup>

In spite of all efforts it has been found next to impossible to get the departments to submit their estimates early. Even the mayor has been obliged to give up his effort to establish an "executive budget" for his own departments by reviewing their

<sup>1</sup> Charter, Sec. 226 (as amended by chapter 258, Laws 1917. This law became effective April 25, 1917. Up to that time, the charter fixed September tenth as the date for this submission).

<sup>2</sup> "Such budget shall be prepared in such detail as to the titles of appropriations, the terms and conditions, not inconsistent with law, under which the same may be expended, the aggregate sum and the items thereof allowed to each department, bureau, office, board or commission, as the said board of estimate and apportionment shall deem advisable." (Sec. 226.)

<sup>3</sup> Minutes, aldermen, December, 1910, page 714.

<sup>4</sup> Minutes, board of estimate and apportionment, May 28, 1915, Calendar No. 28, page 3178.

<sup>5</sup> Minutes, board of estimate and apportionment, April 28, 1916, Calendar No. 27, page 2137.

<sup>6</sup> Minutes, board of estimate and apportionment, May 12, 1916, Calendar No. 177, page 2730.

## PREPARATION OF ESTIMATES

estimates and submitting them to the subcommittee as a single tentative budget, owing to the failure of some departments to co-operate. The new amendment to the charter, adopted in 1917, has had a much better effect as it is now mandatory on department heads to prepare their estimates by the first of August.

### *The Estimate Forms*

In order to obtain uniformity and afford a proper basis for accounting and audit, the board of estimate and apportionment prescribes particular forms upon which the estimates are to be transmitted.<sup>1</sup> There were in 1916 for the 1917 budget, twenty-two of these forms, each covering particular types or objects of expenditure:

Eight forms, A to H, were prepared for estimates regarding personal service. Four of them, A, C, E and G, were used particularly for all accounts in which employes are paid from but one fund. The other four, B, D, F and H, were for accounts in which employes are paid from more than one fund.

Form I was intended for food supplies alone; K, for forage and veterinary supplies; L, for other supplies—fuel, office, medical and surgical, laundry, cleaning and disinfecting supplies, refrigerating supplies, educational and recreational, botanical and agricultural, motor vehicle supplies and general plant supplies. Separate sheets were used, however, for each class of supplies under Form L, the department heads being required to cross out all titles excepting the one under which the request is being made.

Form M, like Form I, was intended for one class of expenditures only: wearing apparel. Form N, like L, was for other equipment: office, household, medical and surgical equipment, live stock, motorless vehicles and equipment, motor vehicles and equipment, educational and recreational and general plant equipment.

Form O might be used for appropriations for  
Highways materials  
Sewer materials  
Motor vehicle materials  
General plant materials

<sup>1</sup> See note 2, page 12.

On Form P, departments were requested to give estimates of sums needed for repairs, general repairs and motor vehicle repairs.

Form Q was for appropriations for light, heat, power and general plant service.

Form R was used as Form L, N and O, for appropriations under several heads, as follows:

- Hire of horses and vehicles with driver
- Hire of horses and vehicles without drivers
- Storage of motorless vehicles
- Storage of motor vehicles
- Shoeing and boarding of horses, including veterinary services
- Hire of automobiles

Form S was for telephone service alone.

Form T, entitled carfare, contingencies, etc., was for all appropriations classified as follows:

- Carfare
- Expressage and deliveries
- Telegraph, cable and messenger service
- Contingencies
- Fixed charges and contributions

Food supply appropriations in non-institutional departments when such appropriations are used as supper money funds

Forms U and UU were used for several purposes carefully explained in the "Rules of Procedure for Filling Our Departmental Estimate Forms," sent to the heads of the departments.

Besides the request for funds for the coming year and the details of what the money is intended for, the forms were designed to furnish additional information to serve as a basis for judging the merits of each case. Particularly, a comparison with last year's appropriation and expenditure or consumption was afforded. Parallel columns showed the request for the coming year, the "existing condition" based on the "schedule condition" of April thirtieth of the given year, and the proposed increases or decreases. A column was also left for "remarks," intended for explanations of the reasons for such increases or decreases.

On Form I, for food supplies, the above information was supplemented by statements of amount and purchase value of stock on hand on January first of the preceding year, the amount and price of food delivered during the year, the total supply

*PREPARATION OF ESTIMATES*

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available, the total amount consumed by patients and by employes (distinguished separately), the daily per capita consumption by patients and employes, stock on hand at the end of the year, and the supplies ordered but not yet delivered on December thirty-first of the preceding year. Similar information was called for on Forms K, L, M, N and O.

CHAPTER III  
EXAMINATION OF ESTIMATES BY EXAMINING  
BUREAUS

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*Board of Estimate Required to Prepare Budget*

The charter prescribes that the board of estimate and apportionment shall be made responsible for the preparation of the budget:

"The said board shall annually between the first day of October and the first day of November meet, and make a budget of the amounts estimated to be required to pay the expenses of conducting the public business of the City of New York, as constituted by this act and of the counties of New York, Kings, Bronx, Queens and Richmond for the then ensuing year." (Sec. 226.)

The proper fulfillment of this responsibility entails an examination into the grounds for the various requests. Unless the board is to accept the demands of the department heads it must exercise critical judgment on its own part.

In order that information on which to base independent judgment may be made available to the board of estimate, there have been created special staff agencies for investigation. Matters regarding "personal service" are assigned by the board of estimate and apportionment to the bureau of personal service; questions relating to "other than personal service" to the bureau of contract supervision; and appropriations pertaining to education and libraries, referred to its committee on education to be examined by its staff. These bureaus have hitherto received assistance from the bureau of municipal investigation and statistics and the office of the commissioner of accounts.

*History of Establishment of Bureaus*

The examining bureaus have been established comparatively recently, that is, in 1914. Originally, matters pertaining to the budget which were to be investigated were turned over to a "division of investigation," part of the bureau of audit in the finance department (dating from 1902). In 1906, at the request of Comptroller Metz the division became by charter amendment the "bureau of municipal investigation and statistics," but was retained in the department of finance.<sup>1</sup>

<sup>1</sup> Minutes, board of estimate and apportionment, 1906, pages 1305 and 1337. Also see charter, Sec. 151, Article 6.

Meanwhile, owing to the popular agitation for improved budgetary methods, the board of estimate and apportionment was developing a lively consciousness of its responsibility relative to departmental appropriations. A movement was started in 1910 to make extended investigations in several departments. With this object in view a proposal was made to transfer the bureau of municipal investigation and statistics bodily from the finance department to the board of estimate and apportionment.<sup>1</sup> This proposal was laid over several times and finally disappeared after being referred to a select committee consisting of the comptroller and president of the borough of The Bronx. Next, an effort was made to establish investigating committees to study conditions in the departments of education, health, and Bellevue and allied hospitals and an amount was included in the budget for the ensuing year to pay for them.<sup>2</sup> It was also proposed to make an investigation of the salaries of city employes with a view to standardisation.<sup>3</sup> When the budget reached the board of aldermen, however, the appropriations were promptly cut, and the mayor, who was out of sympathy with the board of estimate and apportionment, refused to veto the cut in spite of urgent appeals from many sources.

*Appeal of Board of Estimate to Mayor for Establishment of Budget Staff*

Notwithstanding this check a committee on standardisation of salaries and grades was appointed on December 22, 1910. This committee was continued by resolution adopted October 5, 1911,<sup>4</sup> and an appropriation of \$220,000 was included in the budget for 1912 to finance its operations. This appropriation the aldermen cut as before. Immediately the mayor was again beset by petitions to veto the cut. The board of estimate itself sent an

<sup>1</sup> Minutes, board of estimate and apportionment June 3, 1910, page 2295. "The secretary [of the board] presented a communication from the president of the borough of The Bronx, submitting the following resolution: 'Resolved, That the Bureau of Municipal Investigation and Statistics of the Department of Finance, be transferred to the Board of Estimate and Apportionment, and that the investigating functions now discharged by that bureau in examining the various financial and other matters referred by the Board of Estimate and Apportionment to the comptroller hereafter be discharged under the direct centralised control of the Board of Estimate and Apportionment.'"

<sup>2</sup> Minutes, board of estimate and apportionment, October 26, 1910, page 4262.

<sup>3</sup> Minutes, board of estimate and apportionment, October 31, 1910, page 4395.

<sup>4</sup> Minutes, board of estimate and apportionment, October 5, 1911, page 5016.

urgent appeal, which is worthy of quotation, as indicating the trend of the movement under way and the increasing earnestness of central authorities in the matter of budget reform:

"The appropriation is necessary because the studies which it will make possible are indispensable to scientific budget making.

"The work of budget making cannot be performed satisfactorily in the short time elapsing between the submission of departmental estimates and the statutory limit for the adoption of the budget by the Board of Estimate and Apportionment. Budget making, to be thorough, must proceed throughout the year. This is particularly true at this time when adequate processes are not provided for obtaining needed information as to services rendered and unit costs, and when such information must be secured, if at all, by special inquiry.

"In making budgetary determinations under present methods the Board is often compelled to arbitrary action. Until systematic studies are made of the problems of each department and standards of efficiency established for each branch of departmental service, arbitrary action will continue.

"During the past four years great progress has been made in budget making. This progress, however, has chiefly been in the direction of clarity and definiteness in making appropriations. Slower progress has been made in obtaining information with which to determine the amounts of appropriations. The time has come for putting forth decisive efforts in the direction of obtaining cost data and efficiency records. It has now become imperative that the Board, having put into effect a form of budget which enables financial officers, administrators and the public to know clearly the purposes for which money is appropriated, should equip itself to measure and test the allowances which are made in the budget. To do this properly scientific examination is necessary of the organization maintained to perform the services for which the budget makes provision, and methods employed in carrying out each branch of City work.

"Studies of this character will result in economies through improvement in method, avoidance of duplication and other unnecessary work, and systemization of processes. This has been the experience throughout the City government where studies of this character have been made, and it is the invariable experience in private enterprise when action is taken upon information and not upon guess work.

"The proposed studies will not only provide data for the budget of 1913, but will furnish the basis for obtaining currently cost data and other facts regarding departmental services and needs. Scientific budget making must be linked with close observation of the manner in which the budget is administered after it is voted. In exercising its power of conditional appropriation the Board assumes the obligation of learning whether its conditions are feasible and whether they are lived up to. In exercising its power of transfer the Board should act with fullest information, in order that those adjustments may result in greater efficiency of service.

"The plan proposed provides a basis for co-operation among all branches of the City government under the leadership of the Board of Estimate and Apportionment, in attaining an end commonly desired, namely, economy and efficiency of administration.

"The appropriation should be restored to the budget because it makes it possible for the Board to establish as part of its own organization a budget-making division.

"As now constituted, the Board of Estimate and Apportionment has no staff to assist it in its most important financial act—the preparation of the annual budget. For information upon which to base its appropriations the Board relies upon agents of the Comptroller. It is admitted that the Board should have in its own hands the means of obtaining information upon which to base its budget conclusions. There is no

#### EXAMINATION OF ESTIMATES BY BUREAUS

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statutory compulsion upon the Comptroller to make the analysis of the budget which during recent years he has undertaken in behalf of the Board of Estimate and Apportionment. The staff which the Comptroller employs for this purpose is needed at other times of the year for routine work in the Department of Finance. It is not therefore available for the purposes which are contemplated in the appropriation.

"To deny the Board's right to establish a budget-making staff is to deny its right to deal with the budget intelligently as a Board. In appropriating upwards of \$100,000,000 annually for departmental purposes, the Board of Estimate wittingly or otherwise must pass upon thousands of questions of policy affecting the growth and welfare of the City. Without adequate information it must act either blindly or adversely to the City's interest. To over-appropriate, under-appropriate, or to appropriate wrongly is to work incalculable injury to the City. It is safe to say that throughout the budget, because of lack of adequate information, many times the amount requested for budgetary studies, though unwittingly, has been improperly voted by the Board of Estimate and Apportionment. Budget making is a science, and should be dealt with scientifically. It is the responsibility of the Board of Estimate and Apportionment, and it is a responsibility which the Board should be allowed to discharge. It cannot discharge it without adequate means of obtaining information."

#### *Reply of the Mayor*

The mayor, however, replied to these appeals in his message to the aldermen, December 5, 1911:

"Nor do I see my way clear to veto your action in striking out the item of \$220,000 for investigation of departments, especially in respect to the salaries paid and the systems on which they are conducted. No such power of investigation is given to the Board of Estimate and Apportionment. On the other hand, it is expressly given to the Board of Aldermen by section 54 of the Charter. It would be singular if the Charter gave this power to both Boards. It would necessarily lead to confusion. It would be useless for the Board of Estimate and Apportionment to conduct such investigations when the Departments may ignore the results at will. For instance, a very expensive investigation is now being conducted by the Board of Estimate and Apportionment into the system, the curriculum, and so on, of the Board of Education. The law has entrusted these things to the Board of Education itself. Not even the Board of Aldermen could prescribe a system on which any Department should conduct its business, and impose that system on the head of the Department. That is a matter entrusted entirely to the Mayor of the City. It is quite important that the constitution or structure of our City Government be carefully understood and adhered to. Otherwise disorder and recriminations must inevitably ensue, to the detriment of the public service. The Board of Estimate and Apportionment is given certain powers in the constitution of the City Government. It is for it, like all the other Departments of the Government, to keep within its powers. At all events these investigations should not be entered upon until the law is carefully examined by the Law Department, and their extent and limits carefully defined.

"Moreover, I am of opinion that we do not need to spend any such sum for high-priced outside experts. The City Government has ample machinery for the carrying on of such investigations, and if we all work together we can carry them on with good results and at comparatively small expense. The government of this City is not what is called a government by commission through the Board of Estimate and Apportionment. Our government is not constituted on any such theory; on the contrary, the powers of government are distributed among the Mayor, the Board of Aldermen and the Board of Estimate and Apportionment. The Mayor may prescribe a system for any Department



under its control, with or without an investigation, and the Board of Estimate cannot gainsay it."

Nevertheless, the committee, although unable to carry out the work as contemplated, was again reappointed on April 18, 1912 (Minutes, board of estimate and apportionment, page 1873). Another appropriation of \$75,000 was included in the budget for 1913. That year the efforts of the board of estimate and apportionment met with greater success. The appropriation was allowed to pass by the board of aldermen. The finance committee of the board writes in its report:<sup>1</sup>

"The Board of Aldermen in its consideration of the Budget for 1912 rejected an appropriation for \$220,000 for what was termed standardization of salaries. This question has received much study since that time and this proposed bureau now comes before us in a concrete form for about \$75,000, and is presented in such a way that if the results are secured, which are confidently predicted, it will render a service in connection with the budget making that will benefit the City to an extent largely beyond its cost."

In December, 1912, the committee was able to start work by means of a transfer of \$25,000 from an available fund to the "contingency fund" of the department of finance.

"A sub-committee, consisting of Mr. George L. Tirrell, Chairman, for the Comptroller; Mr. Leo Arnstein, for the Borough President of Manhattan; Mr. James Power, for the Borough President of Brooklyn was appointed. Subsequently Mr. Travis H. Whitney, Secretary of the Public Service Commission, was appointed a member of this sub-committee. Preliminary studies were made and conferences held, in order to determine the plan and scope of the work. After reviewing results of efforts somewhat similar in character in the City of Chicago, in the National Government at Washington, and elsewhere, it was determined that the results desired would be best obtained by a new method of procedure, which was, in substance, for the City, so far as it should require expert services, to avail itself of the intelligence, experience and judgment of men in the various City Departments, and to make use of outside help only in the routine departmental examinations and office work of the committee. Pursuant to this idea, Comptroller William A. Prendergast, for the committee, requested Mr. Charles S. Hervey, Chief Auditor of the Department of Finance, and formerly for many years Supervising Statistician of the Bureau of Municipal Investigation, to assume the direction of the work under the title of Director. In a similar way, the Comptroller assigned Mr. George L. Tirrell, Chairman of the sub-committee, to co-operate with Mr. Hervey in the active direction of the work to be done. At the request of the committee, Mr. Fred H. Lindars, of the Bureau of Municipal Research, was assigned to co-operate with Mr. Hervey and Mr. Tirrell."

#### *Board of Estimate Establishes New Bureaus in 1914*

The year 1914 marked the entrance of a new administration, with Mr. Mitchel as mayor. At the first meeting on January 9, a "committee on organization" was established, composed of

<sup>1</sup> Minutes, board of aldermen, December 10, 1912, page 544.

<sup>2</sup> Minutes, board of estimate and apportionment, 1913, page 7294.

the mayor, comptroller and president of the board of aldermen.<sup>1</sup> This committee was to report upon the future organization of committees and staff of the board of estimate and apportionment. In a report on January 22, 1914, it urged the establishment of fourteen distinct committees and five bureaus as part of the internal staff organization of the board. The bureau of standards, now the bureau of personal service, the bureau of contract supervision and a committee on education were among those proposed.

These bureaus established, directors were chosen after due deliberation on February twentieth. Mr. Tirrell, who had been chairman of the subcommittee (see above) in charge of the work of the committee on standardization of salaries and grades established in 1913, was made director of the bureau of standards, which was to continue this work. Tilden Adamson was transferred to the bureau of contract supervision from the bureau of municipal investigation and statistics where he had been employed in work similar to that which would be carried on by the new bureau.<sup>2</sup>

On March twenty-seventh employes were transferred to the two new bureaus. Most of these were taken from the department of finance; some also from the office of the president of the borough of Manhattan, and the departments of education, and of water, gas and electricity. Shortly after, the necessary funds for the salaries of the employes so transferred (\$43,054) were carried over from the finance department, and for running expenses, \$75,000 from "advertising" to the contingency fund of the board of estimate and apportionment.

The working staff of the committee on education was next organized (June twenty-third),<sup>3</sup> and the sum of \$12,000 taken from the contingency fund of the board of estimate and apportionment. Mrs. Mathilde C. Ford, who had been employed in the bureau of municipal investigation and statistics as an examiner, was continued in her line of work as secretary to the committee and chief of the staff.

In 1917 the title of the bureau of standards was changed to the "bureau of personal service," but no change was made in its functions or activities.

<sup>1</sup> Minutes, board of estimate and apportionment, 1914.

<sup>2</sup> Minutes, board of estimate and apportionment, February 20, 1914, Calendar No. 86, page 1143.

<sup>3</sup> Minutes, board of estimate and apportionment, April 24, 1914, Calendar No. 66, page 2812.

*Functions and Duties of the Bureaus*

The three new organizations were in effect simply an enlargement and transfer to the board of estimate as a whole of functions formerly performed by the department of finance under the comptroller.

The division of duties between bureaus was defined in the report of January twenty-third, as follows:

"To the Bureau of Standards it is proposed to commit the work of salary and supply standardization now performed by special staffs under committee supervision.

"To the Bureau of Contract Supervision it is proposed to commit

- (a) Analysis of corporate stock requests;
- (b) Preparation of plans and specifications where necessary, and the review of plans and specifications when prepared by departments;
- (c) Accumulation of cost-data on contract work;
- (d) Analysis of bids received;
- (e) Investigation and submission of reports on the progress of construction contracts;
- (f) Establishment of standard contract practices in various departments having charge of construction work.

"Committee on education. The purpose of this committee will be to obtain the fullest use and benefit of the results of the school inquiry conducted by the last board. The expenditures for education represent so large a part of the city's annual outlay that it is the judgment of your subcommittee that education matters should receive the continued attention of a standing committee. In many important matters it is desirable for this board to have co-operative relations with the board of education. These can be best established by a committee familiar with educational needs."

Owing to considerable duplication of work by the bureaus of standards and contract supervision, more definite rules were outlined in the following year and adopted in the form of a resolution on January 6, 1915:

NO. 290—T.

January 6, 1915.

*To the Board of Estimate and Apportionment:*

Gentlemen—Your Committee on Organization wishes to present for consideration an amendment to the "Rules of Procedure for the Conduct of the Business of the Board," adopted at the meeting of April 24, 1914, for the purpose of defining clearly the duties and functions of the Bureau of Contract Supervision and the Bureau of Standards of the Board. This amendment is offered in the belief that it was the intention of the Board of Estimate and Apportionment in the establishment of the bureaus referred to, to make the Bureau of Standards the reporting agency of the Board of Estimate and Apportionment upon personal service and to make the Bureau of Contract Supervision the reporting agency of the Board upon physical construction work.

Experience of nine months has demonstrated that duplication of work and confusion of duty are inevitable under the present rules. This condition results in waste of effort on the part of the reporting agencies of the Board of Estimate and Apportionment, and in hardship to the various City departments through the necessity to provide the same information for two or more sets of examiners.

**EXAMINATION OF ESTIMATES BY BUREAUS**

We believe that the work of the reporting agencies of the Board of Estimate and Apportionment should be clearly defined, and we are submitting herewith a proposed amendment to the rules of the Board which will, if adopted, effect the distribution of the work which will prevent confusion and duplication.

The proposed amendment will assign to the Bureau of Standards and the Bureau of Contract Supervision, the work that each Bureau is best fitted to do. This work will consist of examinations and analyses as a basis for appropriations and current financial control of appropriations, as required by the terms and conditions governing the budget for 1915.

The proposed amendment will not give any power to prescribe work methods, but only to report and recommend to the Board of Estimate and Apportionment.

We recommend the adoption of the attached resolution.

Respectfully, JOHN PURROY MITCHEL, Mayor; WILLIAM A. PRENDERGAST, Comptroller; GEORGE McANENT, President, Board of Aldermen; Committee on Organisation.

*Resolved*, That, the following "Rules of Procedure for the Conduct of the Business of the Board":

"39. The Secretary shall transmit to the Comptroller, for his examination and report, all requests for transfers of appropriations.

"40. Requests for the modification of salary and wage schedules, not involving changes in compensation or changes in grades or titles of positions, shall be transmitted by the Secretary to the Comptroller. The Comptroller may approve such modifications and so advise the department heads or officials affected thereby. He shall report to the Board at the first meeting of each month the modification of schedules approved by him under this rule for appropriate action by the Board. If the Comptroller disapproves an application, he shall report that fact to the Board for its action.

"41. Requests for modifications of salary or wage schedules involving changes in compensation for individuals, or changes in grades or titles of positions or the establishment of positions or grades, or increases in force, shall be transmitted by the Secretary to the Committee on Salaries and Grades for report by the Bureau of Standards and recommendations thereon by the Committee on Salaries and Grades."

are hereby amended by the substitution of:

39. Examinations, analyses and reports in connection with the tax and corporate stock budgets and in connection with transfers, modifications and revenue bond issues and current expenditures from all funds, by the various departments, boards, bureaus and offices of the city and county government in accordance with the terms and conditions under which appropriations are made for:

Personal Service,  
Supplies,  
Purchase of Equipment,  
Materials,  
Contract or Open Order Service  
or Contingencies.

shall be apportioned as follows:

**I. To the Bureau of Standards**

(a) On the fixation of all rates of compensation of all classes of Personal Service.

(b) On the fixation of the number, title and grade of working units of all classes of Personal Service, except forces engaged on work of physical construction, alteration, repair or maintenance and the operation of mechanical plants.

(c) On the analysis, as a basis for appropriations and current financial control of appropriations, of work methods and organization of all forces

except such as are engaged on work of physical construction, alteration, repair or maintenance, and the operation of mechanical plants.

(d) On the preparation of standard specifications for the purchase of all supplies, equipment and materials.

(e) On the needs of the various departments, boards, bureaus and offices of the city and county government for supplies, materials and equipment for work other than work on physical construction, alteration, repair or maintenance and the operation of mechanical plants.

#### II. *To the Bureau of Contract Supervision*

(a) On the fixation of the number of working units in each standard group of service engaged on work of physical construction, alteration, repair or maintenance and the operation of mechanical plants.

(b) On the analysis, as a basis for appropriations and current financial control of appropriations, of work methods and organization of all forces engaged on work of physical construction, alteration, repair or maintenance and the operation of mechanical plants and the establishment of contract practices in the various departments having charge of construction work.

(c) On the needs of the various departments, boards, bureaus and offices of the city and county government for supplies, materials and equipment for work of physical construction, alteration, repair or maintenance and the operation of mechanical plants.

(d) On all requested appropriations from tax revenue or bond funds for purposes involving physical constructions, alterations, repair or maintenance and the operation of mechanical plants.

(e) On tests of deliveries on contract or open market orders and such other laboratory tests as may be requested by heads of departments or required by the Board of Estimate and Apportionment.

(f) On the review of all plans, specifications, estimates of cost and forms of contract for the purchase of all equipment, and other contractual service to be performed chargeable to tax revenue or bond funds wherever such plans, etc., require approval of the Board of Estimate and Apportionment.

(g) On the preparation of plans and specifications for work of physical construction or alteration when requested by the heads of departments or required by the Boards of Estimate and Apportionment.

(h) The accumulation of cost data on contract work.

(i) Reports on progress of construction contracts when requested by heads of departments or required by the Board of Estimate and Apportionment.

The Secretary shall transmit all requests or communications relating to the above subjects to the Bureau of Standards and Contract Supervision in accordance with the above mentioned apportionment.

Reports on all matters relating to Personal Service shall be made by the Bureau of Standards and Bureau of Contract Supervision to the Committee on Salaries and Grades for their recommendation to the Board of Estimate and Apportionment.

40. The Secretary shall transmit to the Comptroller for his examination and report, all requests for special revenue bond issues and transfers of appropriations for purposes other than those specifically apportioned in Rule 39.

Resolved, That existing Rule 43 shall hereafter be Rule 41.

#### *Subsequent Relations of Bureaus of Contract Supervision and Personal Service*

Even with this definition of duties, however, the fields of the two bureaus were found to overlap. In the budget for 1915, the standard testing laboratory, hitherto part of the bureau of stand-

ards, was transferred to the bureau of contract supervision; and again in the 1916 budget the division of standardization of supplies was likewise transferred.

Today the "bureau of personal service" attends exclusively to matters of personal service, the bureau of contract supervision to "other than personal service." Cases occur, of course, where the work of both bureaus is intimately connected. In the so-called construction departments—the offices of the borough presidents, parks, docks and ferries, plant and structure, etc.,—where departmental labor is employed in works of construction, both bureaus must pass upon the same matter. It is impossible to separate judgments regarding the purchase of equipment, etc., from judgments regarding the employment of the labor which is to use the equipment. The question of organization is a single problem and cannot be arbitrarily divided into "personal service" and "other than personal service." These are terms used for accounting purposes and not for engineers.

In the preparation of the 1916 budget, the experiment was tried of having the bureau of contract supervision attend to both "personal service" and "other than personal service" of the construction departments, but the plan was unsuccessful because the examiners were unacquainted with the standards and systems applied to personal service by the bureau of standards. The custom now is in such cases for the bureaus to make joint reports, examiners from both bureaus investigating the case at the same time and arriving at their conclusions by collaboration.

#### *Organization of Bureaus*

The three staff agencies have each developed an individual type of organization, determined largely by the character of the work performed.

The bureau of personal service is concerned with the standardization of salaries and grades. This bureau is organized on a group system basis. Each group is headed by senior examiners, who report to the bureau chief, Mr. Tirrell, or his immediate subordinate, Mr. Loeser. The senior examiners are each assigned a group of related departments for investigation. They in turn assign to subordinate examiners particular sections of the field to be covered by their group—the assignment being determined more or less by the experience and qualifications of the particular examiners.

This year (for the budget of 1917) departments were assigned to the examining groups as follows:

**FIRST GROUP—INSTITUTIONAL DEPARTMENTS**

Board of ambulance service  
Bellevue and allied hospitals  
Board of child welfare  
Department of correction  
Department of health  
Board of inebriety  
Department of public charities  
Board of parole

**SECOND GROUP—COURTS AND COUNTY OFFICES AND LAW DEPARTMENT**

Commissioners of jurors (all)  
Coroners  
County clerks  
Courts  
District attorney  
Law department  
Public administrators  
Commissioners of records  
Registers  
Sheriffs

**THIRD GROUP—BOROUGH PRESIDENTS AND PARK DEPARTMENTS**

American Museum of Natural History  
Aquarium and Arboretum  
Borough presidents  
Bronx parkway  
Children's museum  
Grant's Tomb  
Jumel Mansion  
Metropolitan Museum of Art  
Museum of Arts and Sciences  
New York Aquarium  
New York Botanical Garden  
Zoological Garden  
Park departments  
Staten Island Association of Arts and Sciences

EXAMINATION OF ESTIMATES BY BUREAUS

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FOURTH GROUP—ADMINISTRATIVE AND CONSTRUCTION DEPARTMENTS

Commissioner of accounts office  
Armory board  
Bridges  
City chamberlain  
Department of docks and ferries  
Department of finance  
Fire department  
Municipal civil service commission  
Municipal garage  
National guard and naval militia  
Police  
Street cleaning department  
Tenement house department  
Department of water, gas and electricity

FIFTH GROUP—MISCELLANEOUS DEPARTMENTS

Art commission  
Board of assessors  
Building examiners  
Central purchasing committee  
Board of *City Record*  
Board of electors  
Examining board of plumbers  
Licenses  
Commissioners of sinking fund  
Board of taxes and assessments  
United States Volunteer Life Saving Corps  
Bureau of weights and measures

The bureau of contract supervision differs in organization from the bureau of personal service in that, instead of being under a group system, each examiner works independently and reports directly to the chief officer. Assignments are made to the examiners along lines of their special training. The principal examiners, in the first place, are held responsible for and have supervision over the investigation of particular departments. One man, a specialist in paving, supervises work covering the offices of the borough presidents; the specialist on dock construction supervises work on the department of docks and ferries; an engineer trained in parking and roads is responsible for



all park departments; an automobile specialist for the fire department, and so on.

While the main assignments of departments are made in this way, the actual work of investigation is divided even more strictly according to specialized training. To the automobile specialists, for instance, are referred estimates for automobiles and automobile supplies of all departments besides the fire department. The clerks and less highly specialized examiners are employed according to the pressure of work and the need for their assistance.

In 1916, the following were the principal lines of specialized training represented in the bureau:

- Paving
- Dock construction
- Sewers
- Water supply
- Building repairs and maintenance
- Combustion and power plants
- Medical and surgical supplies
- Food supplies
- Automobiles, maintenance and operation
- Parking and roads

The advantages of each system are obvious. Under the group system several men are being trained in one field at the same time. If any one of the group falls out, another of almost equal experience can take his place. Under the individual system, where each man is a specialist in a particular field, if a man drops out, no one can fill his place. The advantage of the individual system, on the other hand, is that it permits a much higher degree of specialization.

The group system facilitates procedure within the office. The director is not burdened by interviews with each and every examiner on every single detail. The individual system enables the director to be closely in touch with everything that is going on in his office.

These advantages and disadvantages weigh differently in each bureau. In the bureau of contract supervision, specialization is of primary importance. Engineering is extremely technical work and demands a high degree of specialization. The work of the bureau of personal service, on the contrary, is not so highly specialized. The advantages to be gained from rotation and substitution are correspondingly of greater weight.

Moreover, the bureau of personal service is concerned directly with the organization of personnel of the departments themselves. The department is the unit of study. A thorough knowledge of the personnel and of the work of each individual in the department from top to bottom is a matter of primary importance. Specialization along "horizontal" lines, managerial service, clerical service, etc., would be impracticable. For the bureau of contract supervision, the department as such is secondary in importance as compared with the particular piece of work or type of work under consideration: paving, construction of buildings, or of bridges, the purchase or care of automobiles, etc.

*Qualifications of Examiners*

The bureau of personal service employed on the 1917 budget sixteen examiners with salaries ranging from \$3,500 to \$1,800, the average salary being \$2,381. Eleven of the sixteen men have been in civil service employ for ten years or more; the average length of service for all examiners in the bureau being twelve years.

The bureau of contract supervision employed fifteen responsible examiners,<sup>1</sup> with salaries ranging from \$5,000 to \$2,280, an average salary of \$3,043. Ten have been in the civil service for ten years or more; the average of the bureau being thirteen years.

The staff of the committee on education consists of four employes (including Mrs. Ford), with an average salary of \$2,770, and an average length of service of four years. Mrs. Ford alone has served ten years.

The following tables give the details regarding the civil service experience of the examiners:

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<sup>1</sup> Clerks are frequently employed on the less important pieces of work.

THE NEW YORK CITY BUDGET

BUREAU OF PERSONAL SERVICE

SALARY 6/16	DATE OF ENTRANCE	ORIGINAL POSITION	NUMBER OF YEARS SERVICE
\$3,500	'07	Bookkeeper, 4th Grade, Finance Department	9
3,080	2/08	Examiner, Civil Service Commission	8
3,000	12/99	Assistant to Expert Accountant, Finance Department	17
3,000	9/11	Auditor of Accounts, Finance Department	5
2,700	1/05	Transitman, President, Richmond	12
2,500	1/03	Expert Accountant, Department of Finance	14
2,400	3/00	Assistant Accountant, Department of Finance	16
2,100	10/99	Assistant Accountant, Department of Finance	17
2,100	8/10	Gymnasium Attendant	6
2,100	6/14	Clerk, 2nd Grade, Department of Water Supply, Gas & Electricity	2
2,100	5/00	Examiner of Claims, Department of Education (Transferred to Finance Dept. '06)	16
2,100	3/05	Junior Clerk, Finance Department	11
2,100	10/06	Clerk, Tenement House Department (Transferred to Finance Dept. '07)	10
1,800	11/04	Clerk, Tax Department	12
1,800	7/00	Office Boy, Highways	16
1,800	8/00	Chainman, Highways	16
\$38,100	Totals		187
\$2,381	Averages		12

EXAMINATION OF ESTIMATES BY BUREAUS

BUREAU OF CONTRACT SUPERVISION

SALARY 6/16	DATE OF ENTRANCE	ORIGINAL POSITION	NUMBER OF YEARS SERVICE
\$5,000	12/04	Computer, Department of Public Works (Transferred to Finance Dept. '04)	12
4,500	7/97	Transitman, Public Improvements (Transferred to Finance Dept. '01)	19
4,500	12/98	Inspector, Masonry and Sewers, Department of Public Works (Transferred to Finance Dept. '98)	18
3,500	7/95	Examiner, Commissioner of Accounts (Transferred to Finance Dept. '13)	22
3,000	8/08	Clerk, 3rd Grade, Tax Department (Transferred to Finance Dept. '08)	9
3,000	2/96	Inspector, Department of Finance	21
3,000	3/06	Transitman, Public Improvements (Transferred to Finance Dept. '06)	10
3,000	1/05	Topographical Draftsman, President, Richmond (Transferred to Finance Dept. '06)	13
2,400	4/01	Assistant Engineer, Rapid Transit, Manhattan	15
2,400	6/08	Assistant Engineer, Department of Water Supply, Gas & Electricity	8
2,400	8/03	Topographical Draftsman, Department of Taxes (Transferred to Department of Finance '07)	13
2,280	7/04	Leveler, President, Richmond	12
2,280	5/07	Topographical Draftsman, Water Supply, Gas & Electricity	9
2,280	5/13	Engineer Inspector, Civil, Grade D, President, Brooklyn	3
2,100	4/08	Clerk, Department of Water Supply, Gas & Electricity (Transferred to Finance Dept. '06)	9
\$45,640	Totals		193
\$3,043	Averages		13

*THE NEW YORK CITY BUDGET*

**STAFF ON COMMITTEE OF EDUCATION**

<b>SALARY 6/18</b>	<b>DATE OF ENTRANCE</b>	<b>ORIGINAL POSITION</b>	<b>NUMBER OF YEARS SERVICE</b>
\$4,000	1/07	Examiner, Department of Finance	10
2,700	10/12	Accountant, 5th Grade, Department of Finance	4
2,400	6/12	Accountant, 4th Grade, Department of Finance	4
1,980	9/14	Examiner, Estimate and Apportionment	2
<b>\$11,080</b>	Totals		<b>20</b>
<b>\$2,770</b>	Averages		<b>5</b>

The complaint frequently made by department officials against the presumption of low salaried examiners in criticizing the organization or management of their departments is difficult to treat without further evidence than is at our disposal. It must be admitted that the examiners often make mistakes; but sometimes on the other hand, they may be better qualified to judge than the recent appointee, the head of the department, himself. In any case, it must be remembered that the difference in salary so often referred to may represent, not any great disparity in knowledge regarding principles of good management, but the burden of greater responsibilities on the shoulders of an executive.

#### *Period of Examination of Estimates*

The examination of departmental estimates is not confined within any fixed dates. It depends largely, of course, upon the promptness and co-operation of the department heads. During the entire year questions concerning transfers, etc., are continually arising and have to be investigated, but the actual examination of estimates cannot begin until after the estimate forms have been filled out by the department heads. Even after that there may be some delay before the bureaus start this phase of their work.

In 1916 the examiners in the bureau of personal service did not receive their final assignments of departments until July thirty-first and, in the bureau of contract supervision, not until September.

#### *Methods*

Originally the examiner went about his work and formed his conclusions quite independently of the department head. In 1916, however, instead of waiting until the department head had completed his estimates, the examiner was sent into the department and assisted in the original preparation of the estimates. In this way much unnecessary duplication of work was avoided, since many differences of opinion and minor details were threshed out before the estimates left the hands of the department executive. This method of procedure has been followed especially by the bureau of personal service. In a letter sent to the department heads, co-operation is strongly urged:

"The practice heretofore has been to have budget estimates submitted by departments. These estimates were then analyzed by the budget examiners and their recommendations made to the committee. In some departments a certain degree of co-operation lessened the period

of discussion between the departments' representatives and the examiners before the committee.

"Your committee suggests that, in the preparation of the 1917 budget the examiners work in co-operation with the departments in the preparation of their estimates, so that these estimates may be submitted, so far as agreements may be effected between the examiners and the departments, as the proposed budget for review by the committee. To bring this about the committee suggests that you designate one or more qualified persons in your department whose duty it shall be to study the specifications of the bureau of standards and to familiarize himself with the procedure followed by the examiners in making their recommendations. It further suggests that the persons so designated make it one of their duties to keep in touch with the budget-making bodies throughout the year, so that subsequent budgets may be made in the same manner. The budget examiners will be instructed to work on the departmental estimates in conjunction with the persons designated by the departments, so that when the estimates are received by the board of estimate and apportionment all necessary investigative work will already have been performed. This method will give the departments plenty of opportunity to ascertain what points of difference they will be called upon to discuss before the committee. This method will undoubtedly prove of great advantage to all concerned. The departments in the past have been handicapped when they appeared before the committee because of their lack of knowledge of the procedure, of the method used in rating positions, and of the appraisals themselves. By having one of their representatives present during the entire process of analysis, appraisal, etc., this condition will be eliminated at an immense saving of time and temper. To sum up, the proposal is that the departments' estimates and examiners' recommendations be made, so far as possible, at the same time."

The necessity for this personal contact of the examiner with the department is especially great in the field of personal service. The personal element is of primary importance in questions of employment. One cannot hire or discharge employes as one purchases or scraps equipment. This is especially true under the civil service conditions obtaining in our municipal governments. For any proper judgment, therefore, the examiner who investigates departmental estimates for personal service should be intimately acquainted with the entire personnel of each department assigned to him. Indeed, it is the boast of some of the examiners that they know by sight and by name, from department head to the lowest laborer, every employe in their departments.

Needless to say such work requires the utmost tact. The investigators are likely to be regarded as interlopers and meddlers. Some examiners are able to get results by sheer force of will, but these really injure the cause by increasing the hostility of the department heads. Tact and persuasion are generally the better avenues of approach.

In the bureau of contract supervision personal contact is not so requisite. Examiners visit the departments only about once a month—sufficiently often to keep in touch with the operations

of the department. In estimates for supplies the old method of examination of estimates is still in force. That is, the departmental estimates are reviewed by the examiner only after they have been made up by the departments. Any decided increase in the request for funds is made an object for investigation, but if no such increased appropriation is requested the estimate passes without further suggestion on the part of the examiner. With materials it is about the same way. Requests for equipment naturally call for more detailed investigation. Each item is a basis for examination. So also in the case of contract service. But for these latter no extreme intimacy with conditions within the department is essential.

The work of the committee on education, on the other hand, is perhaps, even more than that of the bureau of personal service, a matter of intimate contact. The department of education is to a great extent independent of the board of estimate and apportionment. About 75 per cent of the total budget for the department of education is "mandatory." The examiners of the committee on education, in order to accomplish anything, must cultivate in the officials of the department a sympathetic attitude for the work in view.

To judge of particular requests made by the department heads, each bureau has developed its own method of procedure. The bureau of personal service has evolved a very complete system of standardisation, wherein every type and grade of work is carefully defined and appropriate titles and rates of compensation specified.<sup>1</sup> Each instance of salary increase or promotion is considered primarily from the point of view of this classification, with due consideration also to the particular merits of the individual case. Occasionally cases arise that do not fit the standard system and which call attention to deficiencies in the established classification itself.

Vacancies to be filled at the minimum salary rate of grade require a certificate by the assistant director of the bureau of personal service to the board of estimate and apportionment, stating that the new incumbent is to be employed at work which falls within the "service group and grade of the proposed standard titles, work specifications and compensation grades." Other appointments require a special study to ascertain the need for such an appointment, and a report pro or con.

Thus, the personnel of the city government is gradually being

<sup>1</sup> This work was first initiated, as already mentioned, in 1913.



brought into order out of chaos, standard classification into closer adaptation with the actual situation, and the force reduced to the minimum necessary for efficient work.

The original classification was built up on the basis of relatively *a priori* judgments and rough comparisons from department to department. At first committees were established within the various departments consisting of two or three men "believed by the department head to be most intimately familiar with the methods of work, values of service and individual duties of employes in their respective departments." A description of the work done by the individual employes and written by the employes themselves was certified by these committees and by the examiners of the central committee. Upon the basis of these cards and the information given by the department committees and department heads in conference with the examiners, and comparisons with similar kinds of work in private business, the classification of city employes was finally established. These cards have gradually been supplemented and modified as new information has been collected by the examiners. Tests have also been applied to ascertain the proper organization of various kinds of work, the particular amounts, types and grades of labor to be employed to achieve given results. Special inquiries, for instance, were made into the management of power plants to ascertain the proper number of firemen to employ, and into the operations of waitresses, typewriters, window-cleaning, and laundry workers. Of course, these studies are not exhaustive, and have as yet been carried out in only a few lines.

The estimate forms for personal service, however, which could well be used to some extent for this purpose, call for no information of this nature,—that is, of "cost data." The forms filled out by the examiners are practically identical with those filled out by the department heads. The information called for is classified under the following heads:

- Title of Position
  - Of incumbents for whom no change is requested
  - Of all new positions requested and all existing positions in which changes are requested
- Requested for 1917
  - Number of incumbents
  - Rate
  - Amount
- Existing Conditions
  - Number of Incumbents
  - Vacancies
  - Allowed in schedule
  - Rate
  - Amount

**EXAMINATION OF ESTIMATES BY BUREAUS**

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- Comparison Between Request for 1917 and Existing Conditions
  - Requested increases in salaries of existing force
  - Requested decreases in salaries of existing force
  - Requested additions to existing force
  - Requested reductions in existing force
- Recommended for 1917
  - Number of incumbents
  - Rate
  - Amount
- Comparison Between Recommendation and Request
  - Salary increases recommended over request
  - Salary decreases recommended under request
  - Added force recommended over request
  - Reduction in force recommended under request
- Comparison Between Recommendation and Latest Recommendation
  - Recommended decreases in existing force
  - Recommended additions to existing force
  - Recommended reductions in existing force
  - Remarks

“Analysis sheets” used by the bureau afford no additional information but merely reorganize the data already given.

The bureau of contract supervision is obtaining unit data for food and forage.<sup>1</sup> The estimate Form I calls for the average per capita daily consumption of food by patients and by employes; Form K similarly calls for the average daily per capita consumption of forage. For its own use, the bureau has also developed a special form for highway construction work which aims to give an analysis of costs under heads as follows:

- Department of .....
- Character of Work Proposed .....
- Departmental Request for Year ..... and Cost Data  
for 12 Months Ending ..... 191....
- Location .....
- Limits
  - From .....
  - To .....
- Requested for work to be done during year 191....
  - Surface to be replaced
    - Square yards .....
    - Depth in inches .....
    - Unit cost per square yard .....
    - Total cost .....
  - Foundation to be replaced
    - Square yards .....
    - Depth in inches .....
    - Unit cost per square yard .....
    - Total cost .....
  - Estimated cost of work to be done by departmental labor
    - Supervision .....
    - Labor .....
    - Material .....
    - Transportation .....
    - Supplies and equipment .....
    - Total cost .....

<sup>1</sup> The data given on these forms, however, cannot be relied upon inasmuch as the task of verification, covering a whole year, is too great to be undertaken by the present staff of examiners.

THE NEW YORK CITY BUDGET

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Estimated cost of work to be done by contract	
Supervision .....	
Contracts and open market orders .....	
Total cost .....	
Grand total cost .....	
Recommended for work to be done during year 191....	
Surface to be replaced	
Square yards .....	
Depth in inches .....	
Unit cost per square yard .....	
Total cost .....	
Foundation to be replaced	
Square yards .....	
Depth in inches .....	
Unit cost per square yard .....	
Total cost .....	
Estimated cost of work to be done by departmental labor	
Supervision .....	
Labor .....	
Material .....	
Transportation .....	
Supplies and equipment .....	
Total cost .....	
Estimated cost of work to be done by contract	
Supervision .....	
Contracts and open market orders .....	
Total cost .....	
Grand total estimated cost .....	

Aside from these, cost data have not been formally developed. No extensive collections of data are kept regarding unit costs,<sup>1</sup> although some studies have been made, e.g., into fuel economy. In general it may be said, however, that while each examiner in forming his estimates regarding budget appropriations doubtless tries to bear in mind all elements affecting the cost of operations, there is no scientific collation of data for purposes of comparison and control.

The committee on education is trying to introduce cost data for purposes of control. Among its reports is one published in 1916 on the "Analysis of Funds of the New York (circulation department), Brooklyn and Queensboro Public Libraries." In this report a study is made of the "rebinding rate" with reference to the annual book stock turn-over. A standard rate has been determined, upon which requests for appropriations for rebinding should be based. Other studies in this same report relate to the "deduction rate," or per cent of total book stock to be discarded on account of wear, based on the annual turn-over. It is intended that appropriations for the purchase of

<sup>1</sup> It may be well at this point to caution readers of the *Annals of the American Academy of Social and Political Science* against taking Mr. Adamson's article on the New York city budget too literally (*Annals*, November, 1915, page 249). From page 253 on, where Mr. Adamson speaks of elemental cost data, he is talking theory and ideals rather than describing the system actually followed in New York city.

**EXAMINATION OF ESTIMATES BY BUREAUS**

new books should be based on this deduction rate. Cost data have also been sought for some branches of personal service. In the course of the same study, the analysis of funds, an investigation was made at the request of the committee on education by the efficiency staff of the commissioner of accounts office, regarding the cost of janitorial service in relation to area of floors to be swept, windows to be cleaned, etc., etc. Other studies have been made of the proper organization of clerical service in the libraries with reference to the different kinds of work to be done during the day,—the delivery of books, returning books to shelves, etc. As yet, however, these studies have been found to be too incomplete for practical use by the budget committee.

*The Effectiveness of the Examining Bureaus*

It is impossible to form an accurate estimate of the effectiveness of the work of the examining bureaus. The close supervision in itself acts as a preventive of extravagance on the part of the department administrators. Even where the budget gives considerable latitude in expenditures, the bureaus are a moral influence. The budget, for example, may appropriate to a department a certain lump sum for supplies, but the sum is based upon the department's detailed estimate of exactly what supplies it will need and what prices will have to be paid. Here is an illustration taken at random of such a departmental estimate:

ARTICLE	UNIT OF MEASURE	REQUESTED FOR 1917		
		UNITS	UNIT PRICE	AMOUNT
Ladder	Each	2	\$ 2.00	\$4.00
Ladder, step	Each	4	3.50	14.00
Lovel, split	Each	3	1.00	3.00
Measure	Each	1	.10	.10
Pump, tin, 6-ft.	Each	2	3.00	6.00
Pump, tin, 8-ft.	Each	2	4.00	8.00
Pump, tin, 10-ft.	Each	2	5.00	10.00
Pump, hydrant	Each	6	4.50	27.00
Padlocks	Each	30	.50	15.00
Saw set and stand	Each	2	1.75	3.50
Scales, 1000 lbs. portable	Each	1	15.00	15.00
Tin snips	Each	3	1.75	5.25
Stocks and dies	Each	2	5.00	10.00
Stencils	Each	3	.50	1.50
Tarpaulin rain shed	Each	3	15.00	45.00

See—City Record Supplement, September 26, 1916, page 218.

Now, the items are binding in somewhat the same way as a "gentleman's agreement." If the department head decides later in the year to use the money for some purpose other than that originally specified, he generally notifies the proper bureau of his intention. Should the change have been premeditated and the original estimate a blind to get money under false pretenses, the bureau next year will act accordingly and discount the department's estimate, cutting it even more than the year before.

Inasmuch as the preparation of the estimates is becoming more and more a joint affair of department representative and examiner, many reductions really effected by the examiner are made before the estimates are formally completed.

Nevertheless, some department heads are guilty of exaggerating their estimates in the hope of coming out with at least something more than money enough to cover bare necessities.

Despite these disturbing factors, figures showing the actual reductions made by the bureaus in the 1917 budget requests, are of great interest. In eight of the more important departments chosen at random, reductions were made averaging 6.35 per cent for personal service and 17.75 per cent for "other than personal service." The total sum of the cuts was 5.32 per cent of the amounts requested for "personal service," and 13.5 per cent for "other than personal service."

Data for "other than personal service" were collected for ten more departments, which raised the average reduction from 17.75 per cent to 20.4 per cent, and the ratio of the sum of the cuts for each department to the sum of the amounts requested from 13.5 per cent to 16.4 per cent

**PERSONAL SERVICE**

DEPARTMENT	AMOUNT REQUESTED	AMOUNT RECOMMENDED	AMOUNT CUT	PER CENT CUT
Correction .....	\$813,767	\$767,665	\$45,102	5.56
Health .....	2,889,836	2,663,175	226,661	7.8
Police .....	16,389,391	15,666,036	723,355	4.4
President, Bronx .....	1,141,905	1,122,140	19,765	1.7
President, Manhattan .....	2,558,667	2,305,903	252,764	9.9
Public Charities .....	2,005,969	1,796,890	209,079	10.5
Street Cleaning .....	5,577,570	5,512,335	65,235	1.17
Water, Gas and Electricity .....	2,802,596	2,526,999	275,597	9.85
Totals .....	\$34,178,691	\$32,361,143	1,817,504	
Per cent reduction .....			5.32%	

**OTHER THAN PERSONAL SERVICE**

Correction .....	\$504,471 <sup>1</sup>	\$328,781 <sup>1</sup>	\$175,690	35
Health .....	802,896	696,745	105,951	13.2
Police .....	753,068	567,983	185,085	24.6
President, Bronx .....	325,097	295,124	29,973	9.23
President, Manhattan .....	903,428	690,265	213,163	23.6
Public Charities .....	2,844,748	2,343,566	501,182	17.6
Street Cleaning .....	2,462,829	2,069,881	392,948	15.9
Water, Gas and Electricity .....	4,193,775	4,081,800	111,975	2.67
Totals .....	\$12,790,112	\$11,074,145	\$1,715,967	
Per cent reduction .....			13.4%	
Grand Total for Personal and Other Than Personal Service .....	\$46,968,803	\$43,435,288	\$3,533,471	
Per cent reduction .....			7.9%	

<sup>1</sup> Food supplies were treated separately and have therefore been omitted in these figures.

OTHER THAN PERSONAL SERVICE—TEN OTHER DEPARTMENTS

DEPARTMENT	AMOUNT REQUESTED	AMOUNT RECOMMENDED	AMOUNT CUT	PER CENT CUT
Bellevue and Allied .....	\$1,117,170	\$807,908	\$309,271	27.7
Docks and Ferries .....	893,231	592,190	301,041	33.7
Fire .....	512,149	460,753	51,396	10
Parks, Bronx .....	110,278	100,383	9,895	9
Parks, Brooklyn .....	265,840	183,512	82,328	31
Parks, Queens .....	41,422	36,423	4,999	12
President, Brooklyn .....	788,943	664,987	123,956	15.7
President, Queens .....	967,175	764,831	202,344	21
President, Richmond .....	237,544	147,277	90,267	38
Tenement House .....	24,837	17,764	7,073	28.5
<b>Totals .....</b>	<b>\$4,958,593</b>	<b>\$3,776,028</b>	<b>\$1,182,565</b>	<b>23.8%</b>
Per cent reduction .....				
<b>Total for Other Than Personal Service for 18 Departments .....</b>	<b>\$17,748,705</b>	<b>\$14,850,173</b>	<b>\$2,898,532</b>	<b>16.3%</b>
Per cent reduction .....				

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The significance of these figures may be brought out by comparing them with the amount actually appropriated:

PERSONAL SERVICE

DEPARTMENT	AMOUNT REQUESTED	AMOUNT RECOMMENDED	AMOUNT APPROPRIATED	RATIO AMOUNT RECOMMENDED TO AMOUNT REQUESTED	RATIO AMOUNT APPROPRIATED TO AMOUNT REQUESTED
Correction .....	\$813,767	\$767,665	\$803,239	94.4	98.8
Health .....	2,889,836	2,663,175	2,686,101	92.3	93
Police .....	16,389,391	15,866,036	16,203,510	95.6	99
President, Bronx .....	1,141,905	1,122,140	1,124,460	98.3	98.5
President, Manhattan .....	2,558,657	2,305,903	2,324,015	90.1	91
Public Charities .....	2,005,969	1,796,890	1,973,915	89.8	98.5
Street Cleaning .....	5,577,570	5,512,335	5,449,691	98.8	97.7
Water, Gas and Electricity .....	2,802,596	2,526,999	2,586,773	90.2	92.3
Totals .....	\$34,178,691	\$32,361,143	\$33,151,704		
Ratio to request .....		94.6%	97%		

OTHER THAN PERSONAL SERVICE

Correction .....	\$504,471	\$328,781	\$328,603	65	65
Health .....	802,696	696,745	648,945	86.8	80.7
Police .....	753,068	567,983	686,182	75.4	91
President, Bronx .....	325,097	293,124	305,707	90.8	94
President, Manhattan .....	903,428	690,265	727,903	76.4	80.6
Public Charities .....	2,844,748	2,343,566	2,347,455	82.4	82.5
Street Cleaning .....	2,462,829	2,069,881	2,180,027	84.1	88.5
Water, Gas and Electricity .....	4,193,775	4,081,800	5,115,828	97.5	122
Totals .....	\$12,790,112	\$11,074,145	\$12,340,650		
Ratio to request .....		86.5%	96.5%		
Grand Total for Personal Service and Other Than Personal Service for 8 Departments .....	\$46,968,803	\$43,435,288	\$45,492,354		
Ratio to request .....		92.5%	97%		

EXAMINATION OF ESTIMATES BY BUREAUS



OTHER THAN PERSONAL SERVICE—TEN OTHER DEPARTMENTS

DEPARTMENT	AMOUNT REQUESTED	AMOUNT RECOMMENDED	AMOUNT APPROPRIATED	RATIO AMOUNT RECOMMENDED TO AMOUNT REQUESTED	RATIO AMOUNT APPROPRIATED TO AMOUNT REQUESTED
Bellevue and Allied .....	\$1,117,179	\$807,908	\$721,050	72.3	64.5
Docks and Ferries .....	893,231	592,190	654,266	66.3	73.2
Fire .....	512,149	480,753	347,109	90	67.8
Parks, Bronx .....	110,273	100,383	98,898	91	89.8
Parks, Brooklyn .....	266,840	183,512	172,052	69	64.7
Parks, Queens .....	41,422	36,423	35,662	88	86
President, Brooklyn .....	788,943	664,987	672,245	84.3	85.3
President, Queens .....	967,175	764,831	777,941	79	80.5
President, Richmond .....	237,544	147,277	162,986	62	68.6
Tenement House .....	24,837	17,764	17,380	71.5	70.5
Totals .....	\$4,958,593	\$3,776,028	\$3,659,587		
Ratio to request .....		76.2%	73.8%		
Total, Other Than Personal Service, for 18 Departments ..	\$17,748,705	\$14,850,173	\$16,000,237		
Ratio to request .....		83.7%	90%		

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CHAPTER IV  
PRELIMINARY HEARINGS OF DEPARTMENT HEADS  
AND EXAMINERS BY THE SUBCOMMITTEE

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Differences of opinion between examiners and department heads which have not been settled in the course of the preparation of estimates must be settled by the board of estimate and apportionment. The responsibility for these decisions and the consolidation of the estimates into a tentative budget is placed almost entirely upon a committee of its own members—the comptroller, chairman, president of the board of aldermen, the presidents of the boroughs of Brooklyn and The Bronx and the mayor, *ex officio*. The routine business of the committee, however, has been assigned to a subcommittee composed of men representing the main committee and the heads of the examining bureaus.

*Composition of Subcommittee*

The subcommittee of 1916 was composed as follows:

<i>Members</i>	<i>Representing</i>	
Robert B. McIntyre, Chairman Chief of bureau of municipal investigation and statistics, department of finance	Comptroller, chairman of main committee	} M a i n  C o m m i t t e e
Paul C. Wilson Assistant secretary to the mayor	Mayor ( <i>ex officio</i> )	
Albert E. Hull Assistant to president of board of aldermen	President, board of aldermen	
George W. Tilsen Consulting engineer	President of the borough of Brooklyn	
J. W. F. Bennett, Consulting engineer	President of the borough of The Bronx	

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<i>Members</i>	<i>Representing</i>	
George L. Tirrell Director of the bureau of standards	Examiners, bureau of standards	} E x a m i n i n g  B u r e a u s
Tilden Adamson Director of the bureau of contract supervision	Examiners, bureau of contract supervision	
Mrs. Mathilde C. Ford Sec'y, Committee on education	Examining staff of committee on education	
Leonard M. Wallstein Commissioner of accounts	Examiners, commissioner of accounts	

*History of Subcommittee*

The subcommittee originated in 1914. Until then the entire work of preparing the tentative budget had been handled by the main committee alone. The pressure of business on the board of estimate, of which the main committee was a part, was becoming greater and greater, however, and at the same time the task of preparing the tentative budget was increasingly difficult. In 1911 the committee adopted a practice of dividing the work, making each member responsible for only a portion of the departments. To the comptroller, for instance, were assigned the departments of Bellevue and allied hospitals, charities, health and police; to the president of the board of aldermen, the departments of education, street cleaning, parks, bridges and fire; to the president of Manhattan, the departments of correction, water, gas and electricity, and docks and ferries. Subsequently, members of the committee on the tax budget adopted a practice of sending subordinates to take their places at hearings where matters of routine nature only were expected to come up.

On September 25, 1914, however, the board of estimate and apportionment adopted a plan for a definite subcommittee.

The members of the first subcommittee were the deputy comptroller, the chamberlain and heads of the bureaus charged with consideration and preparation of the tentative budget—the bureau of municipal investigation and statistics, the bureau of standards, and the bureau of contract supervision. In 1915, the subcommittee was continued by resolution of the board of estimate and apportionment, but the composition was changed by the addition of the assistant of the president of the board of aldermen. On April 28, 1916, in the customary resolution continuing

the subcommittee, the present composition, as suggested by Mr. McIntyre, was adopted.<sup>1</sup>

*Rules and Limitations*

The subcommittee is purely an advisory body, and its functions are limited by rules prescribed by the board of estimate and apportionment. In point of fact, the subcommittee itself frames such rules as it considers advisable, and the board of estimate and apportionment adopts them by formal resolution. In 1916, for example, the committee was not allowed to grant any increases for personal service which would bring the total 1917 appropriation for personal service, including revenue bonds, over that of 1916. It was instructed, however, to grant automatically all increases requested by department heads for employes receiving less than \$1,200, who fulfilled certain minimum requirements. An exact copy of the rules laid down by the board of estimate and apportionment for "information and guidance" of the subcommittee is given in Appendix "B".

*Description of Hearings*

The hearings of the subcommittee in 1916 were open to the public, and persons outside of the government employ were even called in from time to time to give evidence or advice.

Each member of the committee was furnished for guidance with a copy of the "committee sheet." This gives in summary form the information presented on the estimate and examiners' sheets, namely, the existing condition, the departmental requests, and the examiners' recommendations. It segregates the increases and the decreases asked for and recommended, and leaves a space for the pertinent details relative to such increases or decreases.

After the chairman had first read the totals, the committee proceeded to take up every case where the departmental request and the examiner's recommendation were at variance. The department head and the examiner each stated his case, and the committee members asked questions and made suggestions. The necessity of increases in salaries had to be demonstrated to the satisfaction of the committee. If the examiner approved the increase requested by the department, the burden of proof lay with the examiner; if the increase requested was not recommended by the examiner, the burden of proof lay with the department head. Finally a vote was taken and the decision

<sup>1</sup> Minutes, board of estimate and apportionment, April 28, 1916, Calendar No. 27, page 2137.

recorded. Practically every case received specific attention, whether the increase involved \$60 or \$20,000.

Four fifths of the time was devoted to questions relating to personal service rather than to appropriations for supplies, materials, etc. (to judge roughly from the proportion of the pages<sup>1</sup> of the minutes of the hearings).

From attendance at the hearings, from a tabulation of the arguments as appearing in the minutes, and from a study of certain exceptional cases of salary increase (advancements amounting to over 25 per cent) a pretty good idea is possible of the nature of the arguments used on each side. By far the greater emphasis was laid on the relation between the compensation received or requested and the amount and nature of the work done. The department representative would urge, for instance, the difficulty of the work of the particular employe, his peculiar responsibility, long hours or increased duties. Sometimes complaint was made that the civil service specifications were faulty and that correct specifications would place the employe in some other class or grade.

The examiner would urge opposite arguments pointing to the ease of the work, short hours, or decrease in duties, comparing similar work in other departments or in private concerns. Or again, he would point to the possibility of reorganizing the force of the department or of letting some other department handle the particular work.

Aside from the three questions always asked—"How long since the last salary increase?" "How long the term of service?" and "How long at this particular work?"—the personal equation was not conspicuous. When such arguments were brought up they were made subsidiary; and this indeed was in accordance with the request of the board of aldermen in 1915 that the elimination of positions and reduction of salaries should be made "with every care to avoid injustice."

"A card index may properly describe the work of two positions as exactly alike or show how four men should do the work of five, but in neither case can the card show the personal equation of the man, particularly should long and faithful service to the city be considered. A member of the board of estimate and apportionment is worth more to the city after four years of faithful work than on the day he took office. So is any other city employe. It is suggested that men or women who meet this test of personal merit and long service be transferred to other city work if their present positions are deemed unnecessary. If their work is needed, but their pay deemed too much, let their positions, as they gradually become vacant, by death or resignation, be then filled at the

<sup>1</sup> Out of total of 6,260, 854 are in Volume I, not indexed. Of the remaining 5,406 pages, 999 were devoted to "other than personal service."

HEARINGS BY SUBCOMMITTEE

lower rates. Such a policy will, in a very few years, squeeze out any water that is still left in the city's payroll, and it will prevent impairment of the morale of the service, and avoid casting out employes who, by reason of having grown old in the city's service, will find it no easy matter, in these times, to obtain other employment. No policy of economy should be so sudden and rigid as to forbid special consideration of persons under moderate wage whose cases come within the equities above suggested."<sup>1</sup>

Although the personal equation entered into the arguments as only a subsidiary matter, one case was reported where the fact that a certain workman had eight children was the determining consideration (although it was omitted from the minutes) and brought about the grant of an increase of wage which on all other grounds was about to be denied.

Many requests were denied as not backed up by sufficient proof, for the burden of proof always lay with the department head. It should be remarked, however, that the basis for decision in any case was usually of a somewhat general character—not supported by accurate statistical data.

The following brief samples taken at random may serve as fairly typical of the conduct of these hearings and the arguments used:

CHAIRMAN.—\$2,000—\$2,160 requested but not recommended.

COMMISSIONER.—The secretary involved there is C— who was with the old office eight years before I came in. I found him there and found that he was a high grade stenographer. At that time he was handling all hearings over there. Since I have come in he has done all the work formerly done by the crowd at Centre Street, which office was abolished. He handles all my callers, all my correspondence, and takes all my dictation, and is generally extremely busy and a very valuable man.

EXAMINER.—The reason the bureau did not recommend, even though within grade, to the maximum, is because in offices of this size throughout the city you have no secretaries at all. The commissioner or head of such a small department generally has a third grade stenographer. We had a case similar to this in the office of the *City Record*, where the person in charge is getting \$1,800 and the question was whether she should be raised to \$1,980. It is really a third grade stenographic position.

COMMISSIONER.—Except for this, I venture to say I have a hundred callers for every one that the *City Record* has, callers of all sorts. We have to have that kind of a man.

COMMITTEEMAN.—I move that the recommendation of the examiner be approved.

2ND COMMITTEEMAN.—I second the motion.

CHAIRMAN.—That the salary be left at \$2,000?

1ST COMMITTEEMAN.—Yes.

CHAIRMAN.—The motion is carried.<sup>2</sup>

CHAIRMAN.—Code No. 1361-C, botanical and agricultural supplies: the amount requested \$1,632.05. The amount recommended by the examiner is \$632.05. The recommended cut is due to the cost of 1,000 yards of top soil which should be paid out of corporate stock, in which there is available an unencumbered balance of \$11,795.

<sup>1</sup> Minutes, board of aldermen, September 21, 1915, page 204.

<sup>2</sup> Minutes, subcommittee hearings (1917 budget), September 23, 1916, page 813.

- This, according to the statement of the examiner . . . I assume that the recommendation is based upon the provision in the charter which permits expenditures of capital funds for original equipment.
- 1ST COMMITTEEMAN.—How long will that top soil last? I mean, how often do you replace it?
- DEPARTMENT REPRESENTATIVE.—We do not replace it; it goes down into the lawn and remains there forever. We have now three greenhouses. That soil is put in those greenhouses and is taken out every year. That is not a permanent improvement. That is the perennial thing.
- 2ND COMMITTEEMAN.—If that is a supply, that is a different proposition.
- 3RD COMMITTEEMAN.—If it is used in the greenhouses, it is a supply.
- 1ST COMMITTEEMAN.—Can you appraise that part which will go into the greenhouses, and that which will go into the lawn?
- 2ND DEPARTMENT REPRESENTATIVE.—Yes, I should say about one-third would go into the greenhouses this coming year.
- 1ST COMMITTEEMAN.—Then that will be \$350 for the top soil? I make that a motion—that it be \$982.
- 2ND COMMITTEEMAN.—I second the motion.
- CHAIRMAN.—Those in favor?—carried.<sup>1</sup>

### *Effectiveness*

In spite of the limitations imposed upon it the subcommittee relieves the main committee of probably 85 to 90 per cent of the work with which the latter would otherwise be burdened. Only very general comparisons are possible, owing to lack of proper data. If we take as an index, however, the ratio of the total number of salary increases granted this year by the subcommittee to the number of the increases granted by the main committee, out of the total of 2,375 salary increases granted (excluding automatic increases<sup>2</sup> by the rule of October third and increases in uniformed forces of police, fire, street cleaning and correction), 275, or 12 per cent, were granted by action of the main committee. Out of a total value of \$310,696, the value of the 275 increases granted by the main committee was \$47,880, or 13 per cent. In other words, if this index is accurate, the subcommittee does about five sixths of the work. A better basis for comparison might be the number of hours spent by each committee, inasmuch as the figures we have at hand take no account of decreases and of increases denied. While most departments appealed on one count or another, relatively few appeals were granted in increases in "other than personal service."

The actual effect of subcommittee action upon the budget is generally to increase appropriations in a slight degree over the amounts recommended by the examiners. The following table indicates by departments the amount of the change recommended by the subcommittee above or below the recommendation of the examining bureaus:

<sup>1</sup> Minutes, subcommittee hearings, 1916, page 609.

<sup>2</sup> 2,114 salary increases (amounting to \$165,165) not included in this figure, were granted automatically under the rule of October 3.

**PERSONAL SERVICE**

DEPARTMENT	ADDITIONAL AMOUNT RECOMMENDED ABOVE EXAMINER'S RECOMMENDATION	ADDITIONAL CUT RECOMMENDED BELOW EXAMINER'S RECOMMENDATION	RATIO OF INCREASE TO DEPARTMENT'S REQUEST <sup>1</sup>	RATIO OF DECREASE TO DEPARTMENT'S REQUEST
Correction . . . . .	\$31,550		3.88%	
Health . . . . .	7,281		.25	
Police . . . . .		\$4,960		.03%
President, The Bronx . . . . .		2,279		.2
President, Manhattan . . . . .	8,900		.35	
Public Charities . . . . .	198,879		9.95	
Street Cleaning . . . . .		19,421		.35
Water, Gas and Electricity . . . . .	3,792		.135	
<b>Totals . . . . .</b>	<b>\$250,402</b>	<b>\$26,660</b>	<b>5)14.565</b>	
Ratio to request . . . . .	.73%	.08%	2.913%	
Net change . . . . .	\$223,742		2.724%	
Ratio to request . . . . .	.65%			

<sup>1</sup>For example, \$31,550, the amount which the subcommittee added to the examiner's recommendation (\$767,665) is 3.88% of the amount originally requested (\$813,767, see page 41). The amount originally requested is used as a base in order to make possible direct comparisons between increases or decreases effected by the several budget-making agents, the examiners, the subcommittee, and the main committee, as presented on pages 41 and 57.

HEARINGS BY SUBCOMMITTEE



OTHER THAN PERSONAL SERVICE

DEPARTMENT	ADDITIONAL AMOUNT RECOMMENDED ABOVE EXAMINER'S RECOMMENDATION	ADDITIONAL CUT RECOMMENDED BELOW EXAMINER'S RECOMMENDATION	RATIO OF INCREASE TO DEPARTMENT'S REQUEST	RATIO OF DECREASE TO DEPARTMENT'S REQUEST
Correction . . . . .	\$5,383		1.07%	
Police . . . . .	18,409		2.44	
President, The Bronx . . . . .		\$3,867		1.19%
President, Manhattan . . . . .	80,640		3.4	
Public Charities . . . . .	22,089		.775	
Street Cleaning . . . . .	116,409		4.69	
Water, Gas and Electricity . . . . .	3,700		.088	
Totals . . . . .	\$195,720	\$3,867		
Ratio to request . . . . .	1.53%	.03%		
Net change . . . . .	\$191,853			
Ratio to request . . . . .	1.5%			

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\$3

**OTHER THAN PERSONAL SERVICE—TEN OTHER DEPARTMENTS**

DEPARTMENT	ADDITIONAL AMOUNT RECOMMENDED ABOVE EXAMINER'S RECOMMENDATION	ADDITIONAL CUT RECOMMENDED BELOW EXAMINER'S RECOMMENDATION	RATIO OF INCREASE TO DEPARTMENT'S REQUEST	RATIO OF DECREASE TO DEPARTMENT'S REQUEST
Bellevue and Allied .....				
Docks and Ferries .....	\$40,328		4.5%	
Fire .....	13,501		2.64	
Parks, The Bronx .....				
Parks, Brooklyn .....				
Parks, Queens .....	189		.46	
President, Brooklyn .....	5,106		.65	
President, Queens .....	13,110		1.35	
President, Richmond .....	1,950		.82	
Tenement House .....	276		1.1	
Totals .....	\$74,458			
Ratio to request .....	1.6%			
Net change .....				
Total, Other Than Personal Service for 18 Departments .....	\$270,178	\$3,867		
Ratio to request .....	1.52%	.02%		
Net change .....	\$266,311			
Ratio to request .....	1.6%			

HEARINGS BY SUBCOMMITTEES

## CHAPTER V

### HEARINGS BY THE MAIN COMMITTEE

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The main committee is of the nature of a court of appeals. Decisions of the subcommittee unsatisfactory to the department head are carried up to the main committee for decision. Also, of course, all matters which fall outside the province of the subcommittee, as outlined in the rules, are handled by the main committee.

#### *History of the Main Committee*

The formulation of the tentative budget has for many years been entrusted to a special committee of the board of estimate and apportionment. The membership has not been fixed but has depended upon the qualifications of the members of the board of estimate and apportionment and sometimes on political considerations.

In 1906 (July 17), Deputy Comptroller Williams wrote in a letter "It has been customary for some time past for the mayor, upon resolution, to appoint a committee, usually the comptroller, city engineer and corporation counsel to prepare a tentative report." In 1910, the committee was composed of the comptroller, president of the borough of Manhattan and "the acting mayor, whether as acting mayor or president of the board of aldermen," as appointed upon the passage of a resolution adopted by the board September twenty-third.<sup>1</sup>

In 1913 the committee was enlarged to include the presidents of the boroughs of Brooklyn and The Bronx, and the president of the borough of Manhattan took the place of the president of the board of aldermen, "owing to a vacancy in the office of the president of the board of aldermen."<sup>2</sup> A reversal took place in 1914, when Mr. McAneny, hitherto president of the borough of Manhattan, became president of the board of aldermen. Mr. McAneny was a man of very valuable experience in budgetary matters and had been one of the foremost in the movement for improved methods. In order to retain his services on the budget committee, therefore, the composition of the committee was again

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<sup>1</sup> Minutes, board of estimate and apportionment, September 23, 1910, page 4015. See Appendix "I."

<sup>2</sup> Minutes, board of estimate and apportionment, page 7314, 1913.

changed and the president of the board of aldermen was made a member in place of the president of the borough of Manhattan. When Mr. McAneny, in 1915, resigned from the office of the president of the board of aldermen, Mr. Dowling, who took that office, became at the same time a member of the main committee.

#### *Description of Procedure*

The hearings of the main committee in 1916 were held in the comptroller's office in the Municipal Building. The members took seats about a table, the secretary at hand with the minutes of the subcommittee hearings, and the department representatives in seats before the table. Members had been furnished with a memorandum stating the matters to be taken up.

The general conduct of these hearings was slightly different from those of the subcommittee. Perhaps, owing to the fact that the cases before them were chiefly of the nature of appeals, and arguments pro and con had been given before the subcommittee and were incorporated in the minutes, very little evidence was asked for or brought forward by the examiners. In fact, the examiners did not often attend. The hearings simply gave the department head or his representative an opportunity to restate his case with whatever additional force or evidence he could command. The type of argument used was therefore practically the same as that used before the subcommittee.

There was one important difference, however, in the subcommittee hearings: decisions were made on the spot; in the case of main committee, decisions were reserved for the executive meetings so that although the hearings were open to the public, the decisions were made behind closed doors. Moreover, no minutes were kept either of hearings or of executive meetings (at least no minutes open to public inspection) aside from a list of the increases or decreases actually made—no statement of reasons, of appeals denied or of departments heard.

It is argued that this procedure is the only way to get action speedily. Otherwise greatest pressure is brought to bear for reconsideration, such as to delay and sometimes reverse decisions. Whatever the reasons, this practice seems to be an unfortunate and a needless departure from the more open methods of the preceding year.

#### *Effectiveness of the Main Committee*

Matters coming before the main committee, although fewer in number than those passed upon by the subcommittee, are natu-

rally questions of policy. They are not details of routine, such as come before the subcommittee. They also involve, on the average, larger sums of money.

In short, whereas it is true that most of the work on the tax budget is done by the subcommittee, the most important work is done by the main committee. Herein the main committee is the crux of the situation.

The effect of action by the main committee upon the budget appropriations as recommended by the subcommittee, may be indicated by the following table:

**PERSONAL SERVICE**

DEPARTMENT	ADDITIONAL AMOUNT APPROPRIATED ABOVE SUBCOMMITTEE RECOMMENDATION	AMOUNT CUT BELOW SUBCOMMITTEE RECOMMENDATION	RATIO OF INCREASE TO DEPARTMENT'S REQUEST <sup>a</sup>	RATIO OF DECREASE TO DEPARTMENT'S REQUEST <sup>a</sup>
Correction . . . . .	\$4,024		.5%	
Health . . . . .	15,645		.5 <sup>a</sup>	
Police . . . . .	542,434		3.3	
President, The Bronx . . . . .	4,599		.4	
President, Manhattan . . . . .	9,212		.36	
Public Charities . . . . .		\$21,854		1.09%
Street Cleaning . . . . .		43,223		.77
Water, Gas and Electricity . . . . .	55,982		2	
Totals . . . . .	\$631,896	\$65,077		
Ratio to request . . . . .	1.85%	.19%		
Net change . . . . .	\$566,819			
Per cent net change . . . . .	1.66			

<sup>a</sup>As in the tables on pages 51 and 52 above, the amount *originally requested* is used as a base in order to make possible direct comparisons between increases or decreases effected by the several budget-making agents—the examiners, the subcommittee, and the main committee, as presented on pages 41 and 42, and pages 51 and 52. Thus the amount \$4,024, for personal service, added by the main committee to the subcommittee's recommendation for the department of correction is 5 per cent of the amount originally requested, \$812,767 (see page 41).

HEARINGS BY MAIN COMMITTEE

OTHER THAN PERSONAL SERVICE

DEPARTMENT	ADDITIONAL AMOUNT APPROPRIATED ABOVE SUBCOMMITTEE RECOMMENDATION	AMOUNT CUT BELOW SUBCOMMITTEE RECOMMENDATION	RATIO OF INCREASE TO DEPARTMENT'S REQUEST	RATIO OF DECREASE TO DEPARTMENT'S REQUEST
Correction .....		\$5,581		1.1%
Health .....		47,800		5.96
Police .....	\$99,790		13.2%	
President, The Bronx .....	14,450		4.45	
President, Manhattan .....	7,008		.775	
Public Charities .....		18,200		.64
Street Cleaning .....		5,353		2.18
Water, Gas and Electricity .....	1,030,328		24.6	
Totals .....	\$1,151,576	\$78,914		
Ratio to request .....	9.%	.6%		
Net change .....	\$1,074,602			
Per cent net change .....	8.4			

THE NEW YORK CITY BUDGET

**OTHER THAN PERSONAL SERVICE—FOR TEN OTHER DEPARTMENTS**

DEPARTMENT	ADDITIONAL AMOUNT APPROPRIATED ABOVE SUBCOMMITTEE RECOMMENDATION	AMOUNT CUT BELOW SUBCOMMITTEE RECOMMENDATION	RATIO OF INCREASE TO DEPARTMENT'S REQUEST	RATIO OF DECREASE TO DEPARTMENT'S REQUEST
Bellevue and Allied . . . . .		\$86,858		7.8%
Docks and Ferries . . . . .	\$21,750		2.44%	
Fire . . . . .		127,145		24.8
Parks, The Bronx . . . . .		1,487		1.36
Parks, Brooklyn . . . . .		11,460		4.3
Parks, Queens . . . . .		950		2.3
President, Brooklyn . . . . .	2,152		.27	
President, Queens . . . . .				
President, Richmond . . . . .	13,759		5.8	
Tenement House . . . . .		660		2.65
Totals . . . . .	\$37,661			
Ratio to request . . . . .				
Net change . . . . .				
Per cent change . . . . .				
Total, Other Than Personal Service for 18 Departments . . . . .	\$1,189,237	\$305,474		
Ratio to request . . . . .	6.74%	1.72%		
Net change . . . . .	\$883,763			
Per cent change . . . . .	5.02			

HEARINGS BY MAIN COMMITTEE



*Period of Main Committee Hearings*

In 1916 the main committee sat during the last two weeks of October—from October fifteenth, ten days before the last hearing of the subcommittee, to October thirty-first.<sup>1</sup> The same clerk had charge of the calendar for the main committee hearings as for the subcommittee hearings, but no formal arrangements were made in regard to the dates and the dates were not published.

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<sup>1</sup> Over eight weeks was devoted in 1916 to hearings on the budget, counting the time of both the subcommittee and main committee. This may be compared with the three weeks spent in 1909 and the five days spent in 1907.

## CHAPTER VI

### TAXPAYERS' HEARINGS

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#### *Charter Provision*

Before the board of estimate and apportionment has adopted its budget, in fact before the main committee has actually finished its work, hearings are held at the City Hall before the entire board of estimate and apportionment to give taxpayers a chance to express their opinions regarding appropriations for the coming year. Such hearings are provided in the charter as follows:

"Before finally determining upon the budget, the board of estimate and apportionment shall fix such sufficient time or times as may be necessary to allow the taxpayers of the said city to be heard in regard thereto, and the said board shall attend at the time or times so appointed for such hearings."<sup>1</sup>

#### *History of Taxpayers' Hearings*

In 1907, the year after the movement for improved budgetary methods was initiated, a strenuous effort was made to convert the taxpayers' hearings into "a serious, profitable and illuminating experience for taxpayers." This movement was taken up in 1908 by over forty taxpayers' associations. A conference was held on June twenty-ninth, at which a committee was appointed to analyze and discuss budget estimates during the summer, and a request was made to the mayor to grant a hearing on the tentative budget before submission to the board of aldermen at a date sufficiently long after the adoption and printing of the tentative budget to permit examination by the taxpayers and citizens. Later in the year the movement was carried over into the churches. On October third, an appeal was made to nine ministers to bring to the attention of their congregations the importance of budgetary matters and the opportunity afforded for the expression of opinion at the taxpayers' hearing. The following year this general policy was continued. A conference of clergy was held and many sermons relating to financial conditions of the city followed. As a result of these efforts three taxpayers' hearings were granted that year (1909), two on the departmental estimates (on October 13 and 17), and one on the tentative budget after its adoption by the board of estimate and apportionment on October sixth.

<sup>1</sup> Charter, sec. 226.

The attempt to interest the public continuously in the budget and to stimulate attendance at the taxpayers' hearings has, however, proved a failure. From the taxpayers themselves to the board of estimate and apportionment, all unite in pronouncing the hearings a farce.

In 1916 three hearings, on October 26, 27 and 28 were granted for the 1917 budget. At these hearings twenty-five persons appeared, but of the twenty-five, only five represented taxpayers' interests and urged reductions in appropriations. One of the remaining twenty urged an appropriation of \$1,350 "for feeding prisoners held in police stations in Brooklyn, Queens and Richmond, and requested that these boroughs receive the same treatment as Manhattan and The Bronx." The remaining nineteen represented special interests asking for increased salaries and wages. Of these, three urged a 10 per cent increase and one day off for engineers and firemen; four wanted a \$200 per annum increase for engineers of the fire department—a raise from \$1,600 to \$1,800; four spoke in behalf of the police; two requested increases for nurses of the health department, another for attendants of public baths. One man, a representative of the New York Civil Service Employees' Association, "urged that all employes receiving less than \$1,500 be increased \$60 at least; that such increases be granted regardless of efficiency records; that the salaries of employes receiving \$5,000 and over, be not increased until those receiving less than \$2,000, whose salaries were reduced last year, have a chance to recoup and get back the salary which they lost; that all employes receiving between \$1,500 and \$2,000, who have not received an increase in the last five years be granted an increase owing to the high cost of living; that automobile drivers or chauffeurs in the employ of the city be granted a higher minimum and maximum salary, owing to long hours on duty; that the salaries of building inspectors be increased; that the salaries of inspectors of meters be increased; and that the salaries of all nurses in the department of health be increased." Two others complained against the reduction in salary or the removal of certain subordinates.

The taxpayers' hearings, in other words, intended to give the taxpayers an opportunity to offer practical suggestions and to take a hand in making the budget, were mainly opportunities for civic agencies and city employes to make special appeals for increased expenditures—appeals which have usually been without avail. Not only were the taxpayers poorly represented at the hearings,

but the arguments advanced by those who did appear seemed to be without force. As Comptroller Metz remarked in 1909 before one of the conferences held to stimulate public interest in budgetary matters, "The taxpayers all grumble about high taxes, but no one will come down with concrete suggestions as to where to cut down and how to cut down." What was true in 1909, is true today. Arguments advanced are either of utmost generality, or if specific, are insufficiently supported by data. In the hearing of October 27, 1916, for instance, bitter criticism was launched against the increase of salaries at a time when the cost of living was increasing. "The taxes all fall upon real estate. It is not fair to make us pay for them. Our cost of living is increasing also. Besides, the wage-earner in city employ is non-productive. The American workman, in general, is extravagant."

Criticism was offered against the increase in number of instructors and keepers in the department of correction. Mr. McIntyre, chairman of the subcommittee, gave in answer the reasons for the increase: "We wish to increase the service of criminals on the farms. For this, we need keepers. It is because of lack of keepers that they haven't been able to produce much hitherto. I should be in favor of giving the money right now, in order to develop the land for next year. The gain will be great. The departments will get more food supply, an advantage now especially when prices are so high. Hitherto, also, the product of the workhouse has been very poor. They have been handicapped by want of teachers. They need more and better instructors."

The following is copied from the minutes of a hearing held in 1915 on the 1916 budget (Minutes for hearings on the 1917 budget were kept only in part):

Mr. ———.—We respectfully suggest that the pay-as-you-go policy adopted by a resolution at the time of the hundred million dollar loan in September, 1914, be waived for the year 1916, and the amount required to comply with such a resolution be not included in the 1916 budget. I want to say that while I am in favor of the pay-as-you-go policy adopted last September, I do think, in view of the tremendous increase in the tax levy of this year, that at least an amount equal to \$1,800,000, which after all is not a very large amount, should be put in the 1917 budget.

COMPTROLLER.—How would you do that?

Mr. ———.—Simply by doing it.

COMPTROLLER.—Are you aware that the city has obligated itself. . . .

Mr. ———.—No sir, it has not obligated itself. . . . When the hundred million dollar loan was made, the question was asked whether the pay-as-you-go policy was part of a legal consideration for the loan, and the answer was, it was simply a resolution on the part of the board of estimate and apportionment, but it was not one that it

could be compelled to live up to. That is a fact, irrespective of whether you postpone that amount or not.

COMPTROLLER.—Now, Mr. X, you are entirely correct when you say.

MR. ———.—I know I am.

COMPTROLLER.—When you say that that resolution simply imposed a moral obligation.

MR. ———.—A gentleman's agreement.

COMPTROLLER.—As I was saying, you are entirely correct when you say that that resolution simply imposed a moral obligation upon the board of estimate. However, it is an obligation which in my judgment is so strong that I do not believe any board of estimate will attempt to override. In line with that obligation, the city last May or June issued twenty-five million dollars worth of corporate stock upon a serial basis. One of the provisions of that loan require that the city shall redeem next year \$1,666,000 worth of those bonds. The idea of the city or any other political entity issuing bonds and agreeing to make payments for them at a certain period and then failing to provide for the payment of those bonds in its annual budget, seems to me so utterly beside all discussion, that I am not going to say anything further about it.

The representatives of departments and of employes' associations are somewhat better equipped for debate. At least, they have some particular grievance which they understand pretty thoroughly. But they have been heard already. They have had opportunities to speak before both the subcommittee and the main committee. Also, their plea is always for increased expenditure. The hearings have simply degenerated into an opportunity for heated attacks or a final hearing for special interests demanding increased remuneration.

It is very rare, though it does occasionally happen, that any action results from suggestions offered at the taxpayers' hearings.

CHAPTER VII  
ADOPTION OF BUDGET BY BOARD OF ESTIMATE  
AND APPORTIONMENT

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The final adoption of the tentative budget by the board of estimate and apportionment must be accomplished by 12 p.m. on October thirty-first. The charter reads,

"The said board shall annually between the first day of October and the first day of November meet, and make a budget of the amounts estimated to be required to pay the expenses of conducting the public business of the City of New York as constituted by this act and of the counties of New York, Kings, Bronx, Queens and Richmond for the then next ensuing year."

The formal action of the board as a whole consists merely in the final vote. The board as such takes little or no part in making the budget. The work of the main committee is generally so thoroughgoing, that further action is about impossible. Great efforts have been made in the last two or three years to keep the appropriations down to the minimum. In 1915 a wholesale cut was made through almost all departments. In 1916 the committee endeavored to keep appropriations down to the appropriations of the preceding year.

Moreover, the committee has twelve of the sixteen votes of the board. Thus its decision will generally be the decision of the board by virtue of its preponderance of votes on the board:

<b>Committee on the Tax Budget</b>		
Mayor . . . . .	3 votes	
Comptroller . . . . .	3 votes	
President, Aldermen . . . . .	3 votes	
President, Brooklyn . . . . .	2 votes	
President, Bronx . . . . .	1 vote	
	12 votes	
<b>Rest of Board of Estimate</b>		
President, Manhattan . . . . .	2 votes	
President, Queens . . . . .	1 vote	
President, Richmond . . . . .	1 vote	
	4 votes	
	16 votes	

Thus, only matters upon which the committee was divided or in doubt would call for the attention of the three remaining members of the board of estimate and apportionment.

These questions naturally hold over to the last three or four meetings of the main committee. The other members of the board generally attend these meetings at will, according to their interest in particular matters under discussion. As Mayor Mitchel said, therefore, "It is impossible to ascertain whether these meetings are of the committee only or of the whole board, or when the committee meetings become meetings of the whole board."

So irregular is the procedure that a newspaper was led to publish a statement that the salary increases of two officials had been obtained by "trickery," in that they "had been obtained at the eleventh hour from the board of estimate without sufficient consideration by that body—in fact without the knowledge of some of the members of the board." The newspaper was sued for libel by the officials and a substantial verdict was secured.

CHAPTER VIII  
PROCEDURE SUBSEQUENT TO PREPARATION AND  
ADOPTION OF THE BUDGET BY THE BOARD  
OF ESTIMATE AND APPORTIONMENT

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*Charter Provisions*

"After such budget is made by the board of estimate and apportionment it shall be submitted by said board within five days to the board of aldermen, whereupon a special meeting of the board of aldermen shall be called by the mayor to consider  
5 such budget, and the same shall simultaneously be published in the city record. The consideration of such budget by the board of aldermen shall continue from day to day until final action is taken thereon, but such consideration shall not continue beyond twenty days, and in the event of said board of aldermen taking  
10 no action thereon within such period of time, the said budget shall be deemed to be finally adopted as submitted by the board of estimate and apportionment. The board of aldermen may reduce the said several amounts fixed by the board of estimate and apportionment except such amounts as are now or may  
15 hereafter be fixed by law, and except such amounts as may be inserted by the said board of estimate and apportionment for the payment of state taxes and payment of interest and principal of the city debt, but the board of aldermen may not increase such amounts nor vary the terms and conditions thereof, nor insert  
20 any new items. Such action of the board of aldermen on reducing any item or amount fixed by the board of estimate and apportionment shall be subject to the veto power of the mayor as elsewhere provided in this act, and unless such veto is overridden by a three-fourths vote of the board of aldermen, the item or amount  
25 as fixed by the board of estimate and apportionment shall stand as part of the budget. Prior to December twenty-fifth in each year the budget, as finally adopted, pursuant to the provisions of this section, shall be certified by the mayor, comptroller and city clerk, whereupon the said several sums shall be and become  
30 appropriated to the several purposes therein named. On or before December thirty-first in each year the said budget shall be filed in the office of the comptroller and published in the City Record." (Charter, section 226.)

*The Finance Committee of the Board of Aldermen*

It is customary upon the receipt of the tentative budget from the board of estimate and apportionment for the board of aldermen to turn it over to the finance committee. The committee thereupon sets to work to make its own independent estimate



regarding the necessity or advisability of increases and to cut such items as it sees fit.

In 1916, although the budget was transmitted immediately to the board of aldermen, on November first, the finance committee did not begin its work until November fourteenth. As a matter of fact the special meeting of the board of aldermen to be called by the mayor as prescribed by the charter (see page 67, line 3) was not called until the fourteenth. The corporation counsel had given the opinion that if the budget were transmitted within the prescribed period of five days (see page 67, line 2), the law would be complied with.

#### *History and Description of Finance Committee Procedure*

The practice of independent investigation of budgetary appropriations by the board of aldermen began in 1906. In 1902, the finance committee offered to "investigate and report upon any particular points" which "any members of the board desired to raise," but only two questions were brought up, and concerning one of these the committee said that "the time of making the complaint was so late that it was impossible to make a complete investigation."<sup>1</sup> No recommendations were made. In 1906, as the investigational work was begun in earnest, the committee "according to instructions . . . held over half a dozen public hearings, to which heads of departments and bureaus, together with the general public were invited and attended."<sup>2</sup>

This procedure has been followed generally ever since. The committee holds taxpayers' hearings and calls in department heads to present their arguments for the increases in their appropriations. The taxpayers' hearings before the aldermanic finance committee like those before the board of estimate and appropriations, are very poorly attended. In 1907, the committee "regrets to be compelled to note that the general citizen and taxpayer do not take the interest they should in a matter so important to them as is the making up of the annual budget, the total amount of which they are compelled to pay."<sup>3</sup> In 1909, the committee reports that: "it held two duly advertised public hearings. That no representative of semi-official or civic bodies appeared at either hearing to request any reduction in the budget as submitted by the board of estimate and apportionment."<sup>4</sup> In 1914, "out of a population of over

<sup>1</sup> Minutes, board of aldermen, November 25, 1902, page 1397.

<sup>2</sup> Minutes, board of aldermen, November 27, 1906, page 1282.

<sup>3</sup> Minutes, board of aldermen, December 2, 1907, page 628.

<sup>4</sup> Minutes, board of aldermen, November 23, 1909, page 798.

#### SUBSEQUENT PROCEDURE

five million people only seven persons took advantage of these hearings to advise the committee."<sup>1</sup> And again in 1915, the hearing "was attended by a handful of citizens, most of whom offered suggestions entirely nebulous in character."

In 1916, only one taxpayers' hearing was held, on November sixteenth, at which two persons had suggestions to offer. A single day, Thursday, November twenty-second, was given to hearing the department heads. Twenty-seven department heads were heard between 10 a.m. and 4 p.m., with recess for luncheon. Aside from these two hearings, only three or four executive meetings were held, despite positive provisions in the charter that "the consideration of such budget by the board of aldermen shall continue from day to day."

"Although the aldermen," says the *Brooklyn Eagle*, November 28th, "have had the budget two weeks in their hands, since it was adopted by the board of estimate, the finance committee to which it was referred is not ready to report yet. The committee has only had two meetings and is said to be 'marking time.' It is said that so far it has decided nothing as to cuts to be made.

"As a matter of fact, the board intends to follow its action, or inaction, of last year. It will wait until the last legal day that it can accept or reject or change the budget."

Budget procedure in the board of aldermen, in short, has been marked by an increasing lack of interest.

The procedure also suffered in 1916 in point of publicity. No meetings of the finance committee were open to the public except, of course, the taxpayers' hearing. All decisions were made in secret. Even the department heads themselves were not notified in many cases what cuts in their appropriations were being contemplated.

#### *Composition of Finance Committee*

The finance committee is not a stable body. Although usually there have been one or two members with three or more years' experience, the majority have always been new men or men with only short training. On the 1916 committee, one, Mr. Diemer, had a record of at least eight years' service on finance committees; Mr. Kenney, the chairman, had served since 1910 except for 1914. Mr. Stevenson served in 1916 and the year before; Mr. Stapleton and Mr. Kenneally, each a year, in 1911 and 1909, respectively. Messrs. Eagan, Delany and Bent were new members. The following table indicates the composition of finance

<sup>1</sup> Minutes, board of aldermen, November 29, 1915, page 457.

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committees of the last six years, relative to the experience of the members:

YEAR	NUMBER OF YEARS' EXPERIENCE								
	0	1	2	3	4	5	6	7	8
1916	3	1	2	..	..	1	..	..	1
1915	..	3	4	..	1	..	1	1	..
1914	4	3	..	..	..	..	1	..	..
1913	4	2	1	1	..	2	..	..	..
1912	5	1	..	..	2	..	..	..	..
1911	2	2	..	2	..	..	..	..	..
1910	4	..	2	..	..	..	..	..	..

*Adoption of Report of Finance Committee by Board of Aldermen*

After its investigation, the finance committee embodies its conclusions in a report, which is thereupon submitted to the board of aldermen to vote upon. As said above, the 1916 committee developed its report in strict secrecy and not until the last day allowed by the charter for the consideration of the budget, barely an hour before the meeting of the board of aldermen did it bring out its recommendations into the light of day. Practically no time was given for other members of the board of aldermen, outside of the finance committee, to study the report. The report was slated to go through *in toto* without any modification. Although the department heads affected had been called in before the board of aldermen and were heard regarding particular cases in which they were concerned, and although some time was allowed for attacks by the minority, the recommendations of the committee were passed without modification by a strict party vote.

*Policies of the Board of Aldermen*

The general policy of the board of aldermen is to favor the "little man." This is a principle which has been repeatedly emphasized from the very beginning. In 1906, the committee declared:

"As a general recommendation, the committee believes that the time has come for large salaries to be sparingly raised, and then only after consideration of the facts, and most of the following reductions are recommended for the reason that your committee does not believe that the salary raises proposed to be made are justified. As a general proposition, the committee unanimously believes that if the city's financial con-

#### SUBSEQUENT PROCEDURE

dition warrants salary raises, that the \$600 a year clerks' and the \$2 a day laborers' claims be first inquired into and adjusted."<sup>1</sup>

In pursuance of this principle a line was drawn in 1915 at a certain salary, \$2,500, above which any increases were to be denied:

"We further believe that, if the necessity for immediate economy has come upon us so grievously, it is fair that those who have received salary increases in the 1916 budget should, where those salaries are already \$2,500 a year or over, wait a year before their pay is raised. Nor should those receiving less than \$2,500 a year, whose pay has been raised to beyond the \$2,500 mark, receive any further increase than such as will bring their salaries up to \$2,500 a year. There are scores receiving smaller salaries and wage rates, who have received slight increases, and these we do not desire to take away; but it is believed that anyone now receiving \$2,500 a year can manage to get along another year on the same amount."<sup>2</sup>

In 1916, the limit was raised to \$4,000:

"The committee does not think it wise to increase the salaries of any employes receiving \$4,000, nor can it approve any salary increase that brings the employe beyond that point."<sup>3</sup>

Considerable hostility has been displayed against the movement toward the employment of efficiency experts in municipal government. The sentiment expressed by Mayor Gaynor in his message to the aldermen on December 5, 1911, has been echoed again and again:

"I am of opinion that we do not need to spend any such sum for high-priced outside experts. The city government has ample machinery for the carrying on of such investigations, and if we all work together we can carry them on with good results and at comparatively small expense."<sup>4</sup>

The history of the struggle to establish investigating bureaus already recounted above (see page 16) is sufficient evidence in itself of the attitude of the board of aldermen.

"There appears to be a marked tendency," writes the finance committee in 1912, "toward increasing the number of city employes along professional lines, notwithstanding the fact that the salary lists show that the city now supports an enormous number of this character of workers. It seems to be a matter of habit that as soon as one of these professional men is comfortably and firmly seated he commences to yearn for from one to ten assistants, and results prove that he is apparently able to make his wants of this nature respected, and there is an immediate effort to provide him with the desired companionship on the part of his lay superior."<sup>5</sup>

Again, in 1914, the committee of that year reported:

"We believe that the city government contains a duplication of investigating forces. We find that in addition to all the bureaus and committees

<sup>1</sup> Minutes, aldermen, November 27, 1906, page 1263.

<sup>2</sup> Minutes, aldermen, December 14, 1915, page 638.

<sup>3</sup> Minutes, aldermen, December 4, 1916, page 715.

<sup>4</sup> Minutes, aldermen, December 5, 1911, page 336.

<sup>5</sup> Minutes, aldermen, December 10, 1912, page 544.

of the board of estimate and apportionment, each with a paid staff, that there are also the committees of the board of aldermen, each without a paid staff, the various bureaus of the finance department, the staff of the commissioners of accounts, and finally a special 'efficiency staff' in the office of the commissioners of accounts, in addition to the executive efforts toward good management that are being made by the heads of the different city departments. We believe that, as an obvious beginning toward the reduction of these duplications, the present efficient staff of the commissioners of accounts might get along without the 'efficiency' staff that was transferred there some time ago from the board of estimate and apportionment. The explanations and reports of the work of this staff have not sufficiently convinced us of their value. Almost all of the commissioners were questioned on this matter, and almost all believed that they could administer their departments just as well without this additional aid."<sup>1</sup>

The following is reported as coming from a certain prominent alderman (1916):

"Efficiency engineer!" he cried, "efficiency engineer? What is an 'efficiency engineer'?—I know what 'efficiency' is, and I know what an engineer is, but what is an 'efficiency engineer'?"

"It seems to me an 'efficiency engineer' must be something like a Welsh rabbit: it isn't Welsh; it isn't a rabbit—it's just a piece of cheese."

Their policy in this respect was clearly evidenced in their arguments against the establishment of a business manager for the school system. The schools of New York City are run by a board composed of forty-six members, serving without salaries. The board is split up into numerous committees to deal with various phases of their work. Under such a system of management, waste and inefficiency are inevitable. "It is a mere fiction," the mayor asserts, "to assume that busy men and women appointed to the board of education for purposes of framing general policies and supervising the schools, can give their time to the host of details that the expenditure of upward of \$12,000,000 annually represents." Indeed, the existing evils of our school system are admitted by the aldermen themselves. "But all these ills," says an alderman in urging the elimination of this position of business manager, "are not going to be cured by one man," and, "the president of the board [Mr. Dowling] thinks a business manager is unnecessary—the members of the school board are themselves competent to run the schools, and 90 per cent of the teachers are against the proposition." It is extravagance to pay a salary of \$10,000, while the city gets the services of the board for nothing.

The political factor, though of course not admitted by the committee itself, undoubtedly enters as a consideration. The mayor pointed out in his veto message, December 11, 1916, that the

<sup>1</sup> Minutes, aldermen, December 15, 1914, page 731.

**SUBSEQUENT PROCEDURE**

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principles laid down by the finance committee have not been applied consistently but appear to have been warped by political considerations:

"You state that you cannot approve of recommendations for salary increases where the existing salary, or the salary which would result from the rate which the Board of Estimate incorporated in the budget, exceeds \$4,000. Having set up a rule you proceed to violate it. A number of salaries at present exceeding \$4,000 in the existing budget, or brought above \$4,000 by increase in the 1917 allowances, were reduced by you to their existing rates. In at least six important cases, however, which my examination of the budget reveals, you have approved and allowed increases in salaries where the present rate exceeds \$4,000, or will be raised above that amount by the increase proposed. . . . Each of these six cases is meritorious, and you acted wisely in not setting aside the action of the Board of Estimate. But equally meritorious are the increases which you have disallowed, and your action respecting them is in my judgment grossly unfair and correspondingly unwise.

"If the principle you laid down were sound, I would gladly give it my earnest consideration. But its unsoundness is shown by your own discriminating disregard of it. The result of your action is not to apply a principle, but to exercise unexplained discrimination under the cloak of a principle. Had you presented facts regarding any individual proposed increase to show that the Board of Estimate had acted unwisely, I should regard it my duty to consider them and to discuss them. You present no facts, only arbitrary conclusions.

"If salary increases had been given to individuals, without regard to the merit of the individual or the character of his work, and merely as a bestowal of bounty, as sometimes was done in earlier days without any shock to the then Aldermanic conscience, blanket disapproval would be justifiable. But no such case exists in the present budget. All salary increases were carefully considered, recommended by department heads, scrutinized by examiners and passed upon by members of the Board of Estimate and Apportionment. My personal acquaintance with many of the cases convinces me of the un wisdom of your course to the degree of absurdity.

"You have especially, it seems, addressed your attention to the salaries of agents of the Board of Estimate and Apportionment, and to assistants to the Mayor and the Comptroller. Many of the men whose salaries you have reduced, by their work, save to the city many times during the course of the year the amounts that your Board has been able to recommend for reduction in this budget.

"In addition to your action regarding the salaries of employes receiving \$4,000 or more, or whose work the Board of Estimate has rated above that amount in the 1917 budget, you have denied increases to twenty-six employes receiving salaries under this sum. You claim no guiding principle in this action, but only your right to exercise judgment. You state no reasons with respect to any particular action, except in the case of increases granted to employes in the efficiency staff of the commissioner of accounts office, against whom you seem to have a special animosity, quite understandable in the light of the history and activities of that office.

"I have earnestly sought to discover whether a mistake has been made by the Board of Estimate in granting any of the increases to the employes against whom your disapproval has turned. I find none, but on the contrary, I find that some of the men whose increases have been disallowed in the performance of their duties, have incurred the enmity of little politicians, and for this reason are doubly entitled to receive recognition for effective work."<sup>1</sup>

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<sup>1</sup> Minutes, board of aldermen, December 12, 1916, page 764.

THE NEW YORK CITY BUDGET

Comptroller Prendergast attacked the work of the finance committee as follows:

"Here we have a Tammany committee whose members are always shouting about their interests in the lower-paid public employes, and in the face of their tiresome talk, they have reduced to \$1,380 the salary of a foreman of stables in the department of correction, which was fixed at \$1,500. Of course, there must be some special reason why they attack this little man. I am informed that the reason is that he is not on good terms with a Tammany alderman, who took advantage of this opportunity to make good his spite."

*Effectiveness of Aldermanic Action*

With the utmost efforts on the part of their committee the recommendations of the aldermen have, with a single exception, amounted to an insignificant figure during a period of eleven years.<sup>1</sup> In the following table is afforded a comparison between the proposed aldermanic cut and the total tentative budget, and also between the cut and the increase of the tentative budget over the actual budget of the preceding year:

BUDGET FOR YEAR	TOTAL TENTATIVE BUDGET	INCREASE OF TENTATIVE BUDGET OVER ACTUAL BUDGET OF LAST YEAR	PROPOSED REDUCTION BY BOARD OF ALDERMEN	PER CENT REDUCTION TO TOTAL BUDGET	PER CENT REDUCTION TO INCREASE OF TENTATIVE BUDGET
1917	\$211,115,017	\$1,841,161	\$120,420	0.06%	
1916	212,956,178	13,966,391	90,760	0.04	0.65%
1915	199,233,287	6,237,735	408,700	0.2	6.5
1914	192,995,552	284,111			
1913	193,047,246	11,956,989	583,525	0.3	4.9
1912	189,210,950	15,131,615	8,151,193	4.3	53.
1911	174,079,335	10,949,065	111,500	0.06	1.
1910	163,130,270	7,585,122	2,000	0.001-	0.026
1909	156,545,148	15,982,882			
1908	140,572,266	10,150,760			
1907	130,421,506	23,616,016	259,700	0.02	1.1
			Average	0.623	9.6
			Median	0.06	1.1

The cut of 1912 is the exception referred to. The average of the cuts of each year given, even including 1912, is only six-tenths of one per cent of the tentative budget as adopted by the board of estimate and apportionment, and less than 10 per cent of the increase in the tentative budget over that of the preceding year. Using the "median" which avoids the effect of either extreme,

<sup>1</sup> This was written before action on the 1918 budget which was reduced by the aldermen, a total of \$1,857,344.

**SUBSEQUENT PROCEDURE**

the proposed cut is only six one-hundredths of one per cent of the total budget and only one per cent of the increase of the budget over the preceding year.

In the past, even this negligible figure has been still further reduced by exercise of the mayor's veto so that the actual reduction in the budget as adopted by the board of estimate and apportionment has been as follows:

BUDGET FOR YEAR	PROPOSED REDUCTION	AMOUNT VETOED	AMOUNT ACTUALLY REDUCED	PER CENT OF TOTAL BUDGET	PER CENT OF INCREASE
1917	\$120,420	\$119,540	\$880	....	....
1918	90,760	90,760	.....	....	....
1915	408,700	165,200	243,500	0.12%	8.9%
1913	583,525	247,720	335,805	0.18	2.8
1912	8,151,193	31,500	8,119,693	4.8	53.



CHAPTER IX  
THE MAYOR'S VETO

After action by the board of aldermen the budget is returned to the mayor for his certification or veto. If he exercises his veto power, the board of aldermen may again vote upon their recommendations which they may pass over the mayor's veto by three-fourths majority.

The veto has been employed six times since the Greater New York City Charter went into effect, in the years 1906, 1911, 1912, 1914, 1915 and 1916—that is, on the budgets for 1907, 1912, 1913, 1915, 1916 and 1917. Three times, in 1906, 1915 and 1916, the mayor vetoed all, or practically all, the reductions recommended by the aldermen. Mayor Gaynor, hostile to the board of estimate and apportionment, used his powers sparingly. Mayor Mitchel, on the other hand, working in thorough accord with the board of estimate and apportionment, vetoed the reductions of the aldermen each year (except in 1917, after this study was completed, when he accepted the cuts made by the aldermen).

DATE OF ACTION	BUDGET OF YEAR	MAYOR	PROPOSED REDUCTION	AMOUNT VETOED
1916	1917	Mitchel	\$120,420	\$119,540
1915	1916	Mitchel	90,760	90,760
1914	1915	Mitchel	408,700	165,200
1912	1913	Gaynor	583,525	247,720
1911	1912	Gaynor	8,151,193	31,500
1910	1911	Gaynor	111,500	.....
1909	1910	McClellan	2,000	.....
1906	1907	McClellan	259,700	259,700

*Effectiveness of the Veto*

Whenever it has been employed, the veto has been effective. Although the board of aldermen attempted to pass its amendments over the mayor's veto in 1906 and again in 1916,<sup>1</sup> in neither instance did they succeed in getting the necessary three-quarters

<sup>1</sup> This statement is based upon the information given in the budgets concerning action by the board of aldermen (see page 3), and upon the references given in the indices of the minutes of the board of aldermen.

vote. In 1906, the count was in the affirmative, thirty-four to twenty-five. In 1916, forty-nine to twenty.

Every effort was made in 1916 to override Mayor Mitchel's veto. The mayor had annulled every cut except three, amounting to \$880 and had denounced the methods of the board of aldermen in no uncertain terms.

The special meeting held for the reconsideration of the budget was set for Saturday, December twenty-third. According to the charter, ten days must elapse, not counting the day on which the message was received, before the aldermen legally can take any action in the matter.<sup>1</sup> The message was dated December eleventh, received by the alderman on December twelfth, so that December twenty-third was the last day allowed for reconsideration. Also the charter provides that the budget must be adopted and certified prior to December twenty-fifth (see page 67, line 26).

#### REASONS FOR INEFFECTIVENESS OF ALDERMANIC ACTION

The ineffectiveness of aldermanic action is due to several reasons.

##### *Limitation of Power of Aldermen to Reduction Only*

The limitation of the power of the board of aldermen to the mere reduction or elimination of appropriations practically destroys the influence of the board. After careful scrutiny of the budget by the board of estimate and apportionment and its agencies very few cuts can be made. To quote the mayor in his veto message of 1916:

"It is generally known by intelligent and interested taxpayers and other citizens that the present board of estimate and apportionment has developed efficiency in making the city's budget to a degree never before attained. Not a dollar is included in this vast, complex forecast of the city expenditures without detailed inquiry and investigation as to its necessity, and without effort to avoid the appropriation, if avoidance without detriment to the city is possible. That this is true of the 1917 budget is substantially shown by the insignificant amount of your reductions. It is also shown by the increasing quantity of service each year obtained from appropriations made and by the many actual decreases in the total allowances for particular activities.

"The \$120,420 which you have attempted to reduce is one-twentieth of one per cent of the total budget. Furthermore, your action relates entirely to personal service, that is, to salaries. You took no action whatever, regarding the millions of dollars appropriated for repairs and supplies, but only with regard to the salaries of particular individuals whose welfare and efficiency you can in this way immediately affect.

"The \$120,420 which you have sought to disallow is but one-tenth of one per cent of the total salary payroll of the city, which amounts to \$105,953,080.41 in 1917. You have not, therefore, achieved any substantial economy. You do not assist the taxpayers in any material way,

<sup>1</sup> Charter, sec. 40.

for I am advised by the comptroller that the reductions will not affect the tax rate in the slightest degree. You only meddle with and upset the carefully considered organization and work plans of those departments of the city government which are charged with responsibility for carrying on the city's work, a responsibility which you do not share."

Few cuts can be made, also, without danger of antagonizing some constituency. This is the more true in that the work of the board of aldermen is more clearly before the public eye than that of the board of estimate and apportionment. By very reason of the small number of cuts that can be made, those few focus attention, especially as they are published separately in the minutes of the board of aldermen and not scattered throughout the entire budget.

#### *Limitation of Period for Aldermanic Investigation*

Owing to the provision that failure to act within the 20-day period allowed by the charter results in the automatic adoption of the budget as proposed by the board of estimate and apportionment, a careful and independent investigation of the merits of each budgetary item is impossible. More than once the finance committee has complained of this shortness of time allowed. In 1914, the committee says: "This report is not intended to be exhaustive. The charter gives the board of aldermen twenty days within which to consider a budget of nearly two hundred million dollars, every dollar of which supplies a live question of municipal policy or management. Without any staff, bureau, or, in fact, a single individual to aid in the work, it is manifestly impossible to examine minutely into every corner of this budget." And so again in 1915.

#### *Lack of Investigatory Staffs*

The limitation on the period of time for action by the board of aldermen may have been imposed on the assumption that the aldermen would make use of the evidence already accumulated by the board of estimate and apportionment and its staff agencies. However that may be, the aldermen have always tried to make their investigations independently. Nevertheless the board has never organized any investigatory staffs such as have been established for the board of estimate and apportionment. Failure to establish these bureaus is probably due to the fact that the aldermen are not so directly and constantly in touch with the departments. Moreover, it is doubtful whether the board has sufficient continuity of policy and unity of purpose to maintain such a bureau and make it an effective instrument.

Until such bureaus are established, however, the board can never hope to be effective in its action. Indiscriminate budget slashing is obviously a short-sighted policy and is bound to react like a boomerang in an increase in appropriations necessary for subsequent years. Yet, without such bureaus and with inadequate time, it is impossible to investigate the appropriations in sufficient detail and with sufficient care to base reductions on solid foundations of justice and reason.

The mayor, on the other hand, as a member of the board of estimate, has the time and the staff to make such detailed studies. He is in a position, therefore, to controvert every argument brought up by the board of aldermen with convincing proofs on the opposite side. Even where their arguments are worded in practically the same way, the mayor's statements are founded on a thorough knowledge of facts while statements of the board of aldermen are of the nature of statements of opinion only. Whereas the aldermen "think" such and such salary increases are undeserved, the mayor replies that that particular man saved the department, through his own personal activity, \$53,000 or \$445,000. Other instances he explains as having been due to the reorganization of the department involving a reduction in force but an increase in the duties of some of the employees. Other instances he explains are due to a change from part-time service to whole-time service, and so forth.

PART III  
FORM OF THE BUDGET

CHAPTER I

CHOICE AND COMBINATION OF BASES OF CLASSIFICATION OF APPROPRIATIONS IN THE NEW YORK CITY BUDGET

The study of the form of the New York City budget involves the consideration of three matters:

- 1—The choice and combination of bases of the classification of appropriations
  - 2—Extent of subdivision of classes or degree of segregation of appropriations
  - 3—Relation of form to terms and conditions
- 

*Definition of the Types of Classification*

The \$200,000,000 appropriated annually for New York City expenditures—the amount that enters into the New York City budget as defined in Part I—represents an outlay for services and materials of infinite variety, which contributes to the support of the municipal government. The services are yielded by employes, clerks, laborers, commissioners, etc.,—an army of upward of 85,000 employes—and the materials range from paper clips to fire engines. The first problem of the form of the budget is how to group these innumerable items of expenditure in such a way as to facilitate financial control over the spending officers.

In the New York City budget five distinct bases of classification are to be found:

- 1—Classification by object
- 2—By structure or organization unit
- 3—By function
- 4—By borough
- 5—By fund from which expenditures are to be made

*Classification By Object*

The first type of classification is that in which expenditures are related to the objects purchased.<sup>1</sup> These objects are grouped into classes, each class being defined in terms of some characteristic pertaining to all objects brought together under that head. In the New York City budget the distinctive characteristic is either something inherent in the object itself, or relates to the use to which the object is to be put. The latter is the more common.

The classes "supplies" and "equipment" are based on a distinction between characteristics inherent in the objects themselves. "Supplies are articles which can be used but once, or which, after being used once, show a material change in or an appreciable impairment of their physical condition. Equipment includes all apparatus, machinery, vehicles, tools, instruments, furniture, fittings and other articles which can be used over and over again without a material change in or an appreciable impairment of physical conditions."<sup>2</sup> So also the classes under equipment, of "live stock," "motorless vehicles" and "motor vehicles" are obviously defined by characteristics inherent in the object.

Classes based on distinctions of use are exemplified by the following:

- Office supplies
- Medical and surgical supplies
- Laundry, cleaning, disinfecting supplies, etc.
- Wearing apparel
- Educational and recreational equipment, etc.
- Highway materials
- Sewer materials
- Building materials, etc.

Care must be taken to avoid confusing the word "object" used above with the same word signifying "purpose"; "classification of appropriations according to object of expenditure," under the latter meaning might be applied to any type of classification.

<sup>1</sup> The hire of labor and the renting of machines (e.g. Holerith machines) are alike in that purchase relates only to the services they render, not to the person or machines itself. "The worker sells his work, but he himself remains his own property" (Marshall, Principles of Economics, page 560).

<sup>2</sup> See pamphlet issued by the comptroller on "Budget Classifications, an Explanation Indicating the Articles Which Belong to Each Classification, and Giving the Definition of 'Supplies,' 'Equipment' and 'Materials' as Used in the 1916 Budget and to be Used in the Budget for 1917."

*Classification By Structure or Organization Unit*

The second type of classification is by structure or organization unit. Under this classification expenditures are grouped according to the department, bureau, or organization unit responsible for them. In the New York City budget the summary of expenditures for each department as a whole comes under this type of classification. So also is the grouping of appropriations on the basis of the institution in the departments of health, public charities and Bellevue and Allied Hospitals.

*Classification By Function*

The third type of classification enumerated, classification by function, requires some more careful definition. The term function has been used with the utmost looseness, not only in reference to the New York City budget, but in general theoretical treatises on the subject of budgetary reform. Functions are activities *considered in relation to the agent*. Dictionary definitions describe the word function as "the natural and proper action of anything," "the moral or special action of a thing," "the natural or characteristic action." The term has been used loosely in relation to the budget, not only in the sense defined above, but also in reference to "processes," "uses," and "governmental structure."

In connection with the present study, it will be necessary merely to distinguish between "functions" and "use" and "structure," inasmuch as "processes" do not appear in the New York City budget.

Although functions and uses in common parlance are frequently identical—e.g., the *function* of saw is to saw and the saw is used for sawing—*functions* are defined in terms of positive service or utility rendered by the agent or tool, while *uses* refer merely to the method of employment or application of the agent or tool. Uses and functions appear to coincide when the method of employment or application is defined in the same terms as the function. However, although a number of instances of such coincidence do occur, functions and uses are generally distinct. The use of clothes, for example, is for wearing purposes, a hat is used to cover the head; the function of clothes, however, may be to keep the body warm; the function of a hat, to protect the head. "Wearing apparel" is thus a group based on the use of the object and not its function.

Classification by structure coincides, to a great extent, with classification by function, inasmuch as structural organization is generally based upon functional development. The division between the health department and the fire department, for example, is based on the distinction between the functions of preserving the health of the city and that of prevention of fire. However, structural organization is not absolutely dependent upon functional relations. It is sometimes more practical for a given department to attend to functions that are not properly related to its primary function. The department may be possessed of particular tools, types of labor, etc., which are necessary for the performance of the unrelated functions, but which it would be wasteful to duplicate in the proper department. Such considerations make structural divisions fail to coincide entirely with the functional divisions. For our purposes, however, it will be sufficient (attention having been called to the distinction) to treat the two types of classification together.

#### *Classification By Borough and By Fund*

The two last types of classification found in the New York City budget are relatively unimportant. "Classification by borough" needs no further definition. "Classification by fund," i.e. grouping of expenditures by funds from which the money is to be drawn, really does not belong to the budget proper. As was stated in the discussion of content of the budget, the budget proper includes only expenditures to be made out of the tax levy fund. Although (under personal service) distinction is made between employes to be paid out of corporate stock, water revenue, etc., these amounts are not included in the total appropriation—the "appropriation bill."

#### *Combination of Bases of Classification in New York City Budget*

While each one of the bases of classification described above is distinct from the others, no one is actually used by itself in the New York City budget. Expenditures are summarized, of course, for each department. This is according to the structural type of classification. The departments are themselves grouped under ten main heads, but the expenditures are not summarized for these heads, except in the introductory table forming no part of the budget proper. The ten groups are based on functional divisions, as follows:



*CLASSIFICATION OF APPROPRIATIONS*

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Legislation  
City and county administration  
Borough government  
Educational and recreational  
Protection of life and property  
Health, sanitation and care of dependents  
Correction  
Facilitating commerce and traffic  
Courts  
Central purchase, printing and publicity

Subordinate to the department, expenditures are classified by object, as follows:

Personal service  
Supplies  
Purchase of equipment  
Materials  
Contract or open order service  
Contingencies  
Fixed charges and contributions

Wherever subdivision is carried further, it still follows the principle of object classification:

Personal service  
Salaries, regular employes  
Salaries, temporary employes  
Wages, regular employes  
Wages, temporary employes  
Supplies  
Food supplies  
Forage and veterinary supplies  
Fuel  
Gasoline  
Office supplies  
Medical and surgical supplies  
Laundry cleaning and disinfecting supplies  
Refrigerating supplies  
Educational and recreational supplies  
Botanical and agricultural supplies  
Motor vehicle supplies  
General plant supplies  
Equipment  
Office equipment

THE NEW YORK CITY BUDGET

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- Household equipment
- Medical and surgical equipment
- Live stock
- Motorless vehicles and equipment
- Motor vehicles and equipment
- Wearing apparel
- Educational and recreational equipment
- General plant equipment
- Materials
  - Highway materials
  - Sewer materials
  - Building materials
  - Motor vehicle materials
  - General plant materials
- Contract or open order service
  - General repairs
  - Motor vehicle repairs
  - Light, heat and power
  - Janitorial service
  - Transportation
  - Communication
  - General plant service
- Fixed charges and contributions
  - Debt service
  - Rent
  - Pensions
  - Insurance
  - Care of dependents in private institutions
  - State taxes
  - Advertising

After this point, further subdivision, wherever it occurs, either continues to follow the object basis or returns to functional or structural classification. Thus, under the heading "transportation" we find the object classification continued:

- Hire of horses and vehicles with drivers
- Hire of horses and vehicles without drivers
- Storage of motorless vehicles
- Storage of motor vehicles
- Shoeing and boarding horses including veterinary service
- Hire of automobiles
- Carfare
- Expressage on deliveries

CLASSIFICATION OF APPROPRIATIONS

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“Communication” is subdivided under two heads:

- Telephone service
- Telegraph, cable and messenger service

The use of the functional basis of classification is exemplified in the health department as under personal service, salaries, regular employes:

- Administration
  - Executive
  - Audit and accounts
  - Purchase and storage of supplies
  - Care of buildings and grounds
  - Construction and repairs
- Public health education
- Vital statistics
- Promoting public health
  - Child hygiene
  - Preventable diseases
  - Sanitary inspection
  - Food and drugs
- Laboratory service
  - Research and vaccine
- Hospital service
  - All hospitals, administration
  - Willard Parker and reception
  - Riverside
  - Kingston Avenue
  - Tuberculosis Sanatorium, Otisville
    - Laundry
    - Steamboats and launches

Borough classification and classification by fund, as already stated, are comparatively unimportant and appear only occasionally.

Borough divisions appear in the 1916 and 1917 budgets in only six departments, as follows:

	1916	1917
Education—Under “Other Than Personal Service” . . . . .	p. 25 (and 213)	p. 93
Water, Gas and Electricity—Under “Contract or Open Order Service” . . . . .	p. 55 (and 373)	p. 230
Street Cleaning—Almost Throughout . . . . .	p. 56 (and 317)	p. 234
Fire Department—Under “Maintenance of Volunteer System” . . . . .	p. 40 (and 247)	p. 122
Armory Board—Under “Fuel Supplies” . . . . .	p. 253	p. 126
Memorial Day Observances . . . . .	p. 81 (and 433)	

In the department of public charities, "social investigation" is divided by districts instead of by boroughs, the principle of classification being the same in relating expenditures to geographic divisions.

On account of the infrequency and unimportance of the borough basis of classification, we shall hereafter exclude it from our discussion of New York City budget. The fund basis, as we have said, does not really belong to the budget proper.

To sum up, the combination and relative subordination of the three main principles of classification used in the New York City budget may be indicated as follows:

- |                    |                                     |
|--------------------|-------------------------------------|
| I. Functional      | e.g., Protection, life and property |
| A—Structural       | Police department                   |
| 1—Object           | Contract or open order service      |
| a—Object           | Transportation                      |
| (1) Object         | Hire of horse and vehicles          |
| (2) Functional, or | with drivers                        |
| (3) Structural     |                                     |
| (a) Functional,    |                                     |
| (b) or Structural  |                                     |

The striking feature of the New York City budget, it will be seen, is the predominance of the principle of the object classification. The appropriation of funds *by department*, to be sure, is according to structural divisions. Indeed, the department might be called the fundamental unit of appropriation. The grouping of departments on the basis of function, however, as under the heads "protection of life and property" and "education and recreation," is merely formal, a matter of the arrangement of the contents of the budget. Within the department, the functional or structural subdivisions, such as appear in the health department for instance, on account of being made subordinate to the object classification, effect merely a more detailed segregation of expenditures rather than afford a different type of information. They give the amount to be appropriated for "personal service" in a particular bureau or hospital; they do not show the total amount to be expended for the maintenance of that bureau or hospital. That is, they do not afford a basis for intelligent and complete control over expenditures for the structural unit or the function as such.

## CHAPTER II

### EXTENT OF SUBDIVISION OF CLASSES OR DEGREE OF SEGREGATION OF APPROPRIATIONS

It is very difficult to describe the extent of segregation in the New York City budget, owing to the fact that departments vary so widely in this respect.

In the first place, segregation must be distinguished from itemization. In "personal service" throughout, every position is enumerated in "supporting schedules" by title, grade and compensation. This is itemization, not segregation. Segregation consists in the grouping of items into classes.

To indicate the extent to which segregation has been carried in the 1917 budget, the following table has been compiled showing for eight departments the number of times in each subdivision has reached the extent stated:

**"FREQUENCY" OF SUBDIVISION IN EIGHT DEPARTMENTS**

DEPARTMENT	DEGREE OF SUBDIVISION						
	1st	2nd	3rd	4th	5th	6th	7th
Correction .....	28	13	14	15	11		
Health .....	38	16	37	8			
Police .....	21	14	1				
President, The Bronx .....	24	16	19				
President, Manhattan .....	25	21	30	2			
Public Charities .....	35	45	57	97	214	24	2
Street Cleaning .....	23	26	42				
Water, Gas and Electricity .....	23	16	40	26	5		

The irregularity of practice in segregation is most striking in the class of "personal service":

THE NEW YORK CITY BUDGET

SEGREGATION UNDER PERSONAL SERVICE IN EIGHT DEPARTMENTS

DEPARTMENT	DEGREE OF SUBDIVISION						
	1st	2nd	3rd	4th	5th	6th	7th
Correction .....	4	9	14	15	11		
Health .....	4	9	37	8			
Police .....	4	8	1				
President, The Bronx .....	4	12	19				
President, Manhattan .....	4	17	27				
Public Charities .....	4	42	57	97	214	24	2
Street Cleaning .....	3	18	42				
Water, Gas and Electricity .....	4	7	26				

The extreme, it will be noted, is reached in the department of public charities, where subdivision is carried to seven places. Indeed, in the case of hospital helpers, segregation is actually carried one place further. Thus in the Metropolitan Hospital, forty-seven employes are grouped under the following fifteen functional titles:

- Laundry work
  - Collecting and delivering
  - Assorting soiled linen
  - Operating washing machines
  - Washing
  - Extracting
  - Dry room
  - Mangling
  - Operating press machines
  - Hand ironing
  - Sterilizing
  - Assorting clean linen
  - Body ironing
  - Oiling, cleaning, etc.
  - Repairs, etc.
  - Starching and assorting

Under "maintenance and operation of plant," hospital helpers are classified under titles as follows:

- Elevator man
- Greenhouse
- Handling garbage

*EXTENT OF SUBDIVISIONS*

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Dock tender  
Coal passer  
Care of grounds  
Coal hoist  
Shoe shop  
Weigher  
Watching

As regards classes other than personal service—supplies, materials, etc.,—most departments have little or no further subdivision, but some carry it to the fourth and even fifth place, notably in the two classes, “supplies” and “contract and open order service.” For “materials,” on the other hand, appropriations were granted to the departments of corrections, health, police, and public charities in lump sums.

CHAPTER III  
TERMS AND CONDITIONS

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The significance of the form of the budget is derived from the terms and conditions imposed by the board of estimate and apportionment,<sup>1</sup> which prescribe that expenditures shall be made in strict accordance with the appropriation title, and where these are supported by "schedules," in accordance with the schedules. (These terms and conditions are given in full in Appendix "C".) That is, through the terms and conditions imposed by the board of estimate and apportionment, the form of the budget determines the nature and extent of central control over the departments through their expenditures. The type or basis of classification must determine the nature of the control; the degree of segregation, the extent of the control.

Interpreted in the light of the terms and conditions, the form of the New York City budget classification by object shows that the nature of central control is primarily of an accounting or auditing character. Appropriations are made for specified kinds of objects, and no voucher is issued for a purpose other than designated. No intelligent direction is possible, however, over the work carried on by the department or its structural organization. Of course, it is possible to modify or cripple, and to that extent "control" the work, say, of the department of health in "public health education" or in "sanitary inspection" by reducing the appropriations for personal service for these functions. Inasmuch as such "control" could not be based upon complete information, however, it would not be an intelligent control. The total amount appropriated (1917) for "other than personal service," \$648,945, is not segregated in such a way as to show the apportionment of funds by function. Even in the extremely segregated budget of the department of public charities, where under "personal service" subdivision occurs to the seventh place, no functional or structural groups are retained under "other than personal service"; \$2,347,455 is appropriated for supplies, equip-

<sup>1</sup> Charter, sec. 228, "Such budget shall be prepared in such detail as to the titles of appropriations, the terms and conditions, not inconsistent with law, under which the same may be expended, the aggregate sum and the items thereof allowed to each department, bureau, office, board or commission, as the said board of estimate and apportionment shall deem advisable."



**TERMS AND CONDITIONS**

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ment, etc., without any reference to institutions which are to spend the money or to the work to be carried on. "Functionalization," such as appears in the New York City budget, in short, serves merely as an extension in the direction of *detail of control* over purchasing relations. It does not establish any adequate control over functions as such—the chief argument used by advocates of the functional basis of classification. The New York City budget is primarily—and so long as the functional grouping remains subordinate to the object classification will remain—an instrument for voucher control.

CHAPTER IV  
HISTORY OF DEVELOPMENT OF THE FORM OF THE  
NEW YORK CITY BUDGET

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The present form of budget of New York City is the outcome of a campaign for improved budgetary methods dating at least from the year 1906. It is the product of a long and persistent struggle to overcome numerous evils that had arisen under the old budgetary methods and had been exaggerated by the rapid growth of the city. It is, consequently, a haphazard product of successive attempts to combat these specific abuses, not a carefully conceived, unified, and "harmonious program correlating all features of a proper fiscal policy."

However, although the budget has pursued such an irregular course of development, although many men have contributed various ideas to its make-up, the general trend of its evolution has been determined by certain underlying factors, in the light of which it is possible to interpret and appreciate the form eventually obtained.

About 1905 the staggering increase of municipal expenditures of New York City began to claim the attention of the public. It had become well known that much of the inflation was due to waste, extravagance, and fraud on the part of department officials. Money was appropriated for the different departments in lump sums, under general descriptive titles or, occasionally, under specific statutory requirements. Little control was exerted over the spending officers. In spite of the fact that appropriation titles were so general, funds were frequently used for purposes other than those for which they had been appropriated. In fact, the titles were practically meaningless. Under such circumstances, it is not surprising that department heads took advantage of their opportunities, spent money for political purposes, or personal gain, and asked for increasing amounts from year to year.

In 1905 the burden on the taxpayers became intolerable. A number of citizens drew together and established (January 1, 1906) with funds they themselves contributed, an independent investigating agency, the Bureau of City Betterment, now the Bureau of Municipal Research. In the summer of 1906 negotia-

tions were begun with a view to investigating the financial methods of some of the municipal departments. Commissioner Darlington of the department of health was the first to give permission to the Bureau to enter his department and look over the books (September 6, 1906).

An expert accountant, called in from Haskins & Sells' office, made the study. In his report dated January 15, 1907, it is pointed out with especial emphasis, that there was not the slightest effort to correlate appropriation titles and lines of work carried on by the department. Instead accounts were grouped about funds and classified according to the character of the articles purchased.

"The prime question," wrote the examiner, "is what supplies are used, for what purpose, and what were the results obtained thereby. To this end a segregation ledger should base its classification on the functions and activities of the department, and entries should be made from requisitions or other sources of data as to supplies used, which in turn might be related to the work performed by the department, rather than show articles purchased in relation to the fund from which payment is to be made. In like manner, it should not be assumed that the classified payroll of the department is indicative of the work done by the employes, but the officer in charge of each division should make an intelligent statement of the time spent by those in his charge in the performance of the stated work of his bureau and upon this the cost should be computed and posted in its proper place. In a classification of this kind each bureau, division, function or activity would have a record of cost of labor, supplies, etc., and those in positions of control would have before them the data necessary to the exercise of intelligent judgment."

Owing to faulty methods of accounting, appropriations were requested and granted for the department of health under eleven titles, an indiscriminate mingling of functions and classes of objects, to cover thirty-four distinct "functional lines of work":

- Salaries, board of health and executive officers
- Salaries of officers, clerks, inspectors and other employes
- Supplies and contingencies
- For removal of night soil, offal and dead animals
- Sanitary police
- Disinfection
- Hospital fund (excluding payments to private hospitals)
- Bacteriological laboratory
- Salaries, medical school inspection
- For abatement of nuisances
- Support of ambulance service

¶ The first effort toward improvement aimed to follow the lines laid out by the examiner from Haskins and Sells. It consisted of an attempt to subdivide appropriations by functions, according to groups or lines of activities, the aim being to form a basis "of specific agreement between the appropriation authorities and administrative heads to spend money allotted to them for the purposes indicated in the budget statement."

From the very beginning, however, the effort to "functionalize" the budget was warped into a classification by kind of object. This was due to a number of reasons. In the first place, the men most active and concerned in improvement of budgetary methods were accountants or auditors, whose training and habits of thought gave them an initial bias toward object classification rather than classification by function. Classification by object lends itself to standardization of accounting procedure, while grouping on the basis of function seems to increase the difficulties, inasmuch as the functions must differ in every department. At a time when one of the chief criticisms of the budgetary system was its confusion, there was naturally a leaning toward that basis of classification which promised greater uniformity and order.

This bias was further assisted by the fact that departmental accounts, such as they were, were kept under the object classification. For instance, in the health department the examiner found expenditures "for supplies and contingencies" classified under the heads:

- Postage
- Furniture, supplies and repairs
- Peppermint oil and uranine
- Telephone
- Library
- Incidentals, carfare, express, etc.
- Repairs to buildings, ice and coal
- Chemical laboratory

"for disinfection":

- Purchase, automobile
- Repairs, automobile
- Storage and supplies
- Hire, autos
- Wagons and repairs
- Harness and repairs
- Hose, purchase and hire
- Shoeing
- Horse, feed and livery
- Furniture and repair of stables
- Disinfectants
- Furniture, supplies and repairs to plant
- Cerftares

"for hospital fund":

- Food
- Pharmacy and drugs
- Fuel
- Light
- Furniture, supplies and repairs
- Engineers, supplies and repairs
- Dry goods, clothing, boots and shoes

DEVELOPMENT OF FORM

Crockery and housekeeping  
Repairs and investments, grounds and buildings  
Telephone  
Incidental supplies

Merely to standardize the existing classification was easier than to change the entire basis of classification.

Finally, appropriations by function would apparently fail to correct some of the most trying evils. For instance, the practice had arisen of using funds intended for the purchase of supplies for hiring employes or for unduly increasing the salaries of persons already employed in order to obtain votes at the coming elections. Appropriation by function would leave the door open for the continuance of this practice, unless the appropriations were supported by an intricate system of accounts, to install which would involve much money and time. Appropriation by class of object would apparently check the evil. There would be an immediate chance to make the audit of payrolls and vouchers an effective means to enforce the budget provisions.

The first action resulting from the efforts of the Bureau was the resolution introduced by Alderman Davies at a meeting of the alderman on October 9, 1906, and passed at the same meeting. This is a plea simply for greater detail of budgetary statement. The nature of the detail is not defined and the reference to confining expenditures to the "purposes" indicated does not necessarily imply a classification by function. The resolution ran as follows:

**WHEREAS:** During several years past and especially during this present year, the heads of the departments of this city have felt compelled to request the issuance of very large amounts of special revenue bonds in order to meet their department's ordinary running expenses, explaining that the department's budget allowance had been greatly under the estimate submitted, and that the allowance had been so general and unitemized that the commissioner could not know what reductions were intended and was not able to make a substantial and intelligent reduction;

**WHEREAS:** This board believes that the public interest is opposed to the issuance of these bonds except for emergencies; and

**WHEREAS:** The 1907 budget is now in course of preparation by the board of estimate and apportionment to be later submitted to this board therefore be it

**Resolved:** That the board of aldermen respectfully recommend to the board of estimate and apportionment that in the preparation of the budget for 1907, instead of following the usual course of making general and unitemized allowance to the general accounts of the various departments, the budget do allow specific appropriations, indicating which estimates are *granted* and which are *denied*, in the case of every item in every account, as they appear in the departmental estimate and that the expenditure of each allowance be confined to the purpose as so indicated and to provide, as far as possible, that no transfer be made even of different items in the same account, without the authorization of the board of estimate and apportionment.

Subsequent to this, on October 30, 1906, a resolution, introduced by the comptroller was passed by the board of estimate and apportionment:

**WHEREAS:** The board of estimate and apportionment has received certain preamble and resolutions adopted by the board of aldermen October 9, 1906, requesting that "the budget do allow specific appropriations, indicating which estimates are granted and which are denied, in the case of every item in every account as they appear in the departmental estimate, and that the expenditure of each allowance be confined to the purposes as so indicated," etc.; and

**WHEREAS:** Time has not permitted the adoption of this plan in more than a small part of the budget for 1907; be it therefore

**Resolved:** That it is the opinion of the board of estimate and apportionment that the budget of the City of New York for the year 1908 should contain, whenever possible, a specific item for each class of expenditure to be made thereunder in order that through said budget adequate control may be had over the administrative and other cost of the various city and other departments, especially to prevent increases in salary expenditures by department heads within the budget allowances of said departments for the year but in excess of the annual rates of salary allowances upon which the budget was granted, and for the purpose of carrying out this plan the comptroller is hereby requested to direct the preparation, by the bureau of municipal investigation and statistics of the finance department, and submit to the board of estimate and apportionment, not later than May 1, 1907, an outline plan for the departmental estimate for each one of the departments and county and other offices of the City to which allowances will be made in the budget for 1908, said plan to provide for compliance with the purpose of this resolution in the said budget of 1908.

Which was adopted by the following vote:

Affirmative—The Mayor, the Comptroller, the President of the board of aldermen and the President of the boroughs of Manhattan, Brooklyn and Queens — 14.

Here, as in the resolution passed by the board of aldermen, there is no clear definition of the classification to be adopted, but the suggestion is that of a classification by kind of object. A specific item for "*each class of expenditures*" can only refer to *class of object*, not the *kind of activity or work done*. Expenditures for a function cannot be described very well as a *class of expenditures*.

To aid in the work of budget improvement—the introduction of new accounting methods, etc.—the bureau of municipal investigation and statistics was created through an amendment to the charter secured chiefly by the efforts of the comptroller. The bureau's method of approaching the problem is clearly indicated in words of its report to the comptroller:

"The bureau of municipal investigation and statistics did its first effective budget-making work in 1907. The experience of 1907 in making the budget for 1908 demonstrated that the bureau had before it a very difficult task in getting full information to form the basis for the budget. It was found almost impossible to get such information from the departments. There was no uniformity in the classifications used by the various

**DEVELOPMENT OF FORM**

departments. To remedy this situation, the bureau of municipal investigation and statistics prepared a form of departmental estimates."

The greatest evil encountered by the bureau of municipal investigation and statistics appears to have been the lack of uniformity. The first step was to prepare a standardized form to be filled out by the department heads.

From now on the efforts toward improvement consisted in the development of a uniform classification of expenditures, with the chief aim of voucher or payroll audit, central control over purchase and contract relations. The development of the form of the budget for several departments taken at random clearly reflects the trend of the movement.

In the following table the letters "F," "O" and "G," refer respectively to the *functional* (or structural) basis of classification, to *object* basis and *geographic* or borough division. Reading from left to right, they indicate relative subordination. The years given are the years when any decided change has been introduced:

DEPARTMENT	YEAR
Correction	1908—(F), O
	1909—No real classification
	1910—O, (still no real classification)
	1912—O, F, o
	1913—O, o, F, f, (f)
Health	1908—F, (G) O, f
	1910—F, f, O,
	1912—O, F, f, o
	1913—O, o, F, f (f)
Police	1908—No classification
	1909—F, O,
	1910—O, F,
	1912—O, F, o, 1913—O, o, F, f
Street cleaning	1908—(G), F, O
	1909—(G), O, F
	1912—O, (G), F, o
	1913—O, o, F, (G)
Finance	1908—No classification
	1909—F, O,
	1912—O, F, o
	1913—O, o, F, f

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Borough presidents	1908—F, f, O
	1912—O, F, f, o
	1913—O, o, F f
Water, gas and electricity	1908—F, G, f, (f) O
	1912—O, F, f, o
	1913—O, o, F, f
Charities	1908—(G), F, O
	1909—(G), O, F
	1912—O (G) F o
	1913—O o F f (f) (G)

The trend is unmistakable. The functional classification, primary in 1908, was gradually subordinated to the object classification. In 1912 the subdivisions of the classes of objects were added and made subordinate to the functional divisions, but in 1913, both main object classes and subdivisions were made superior to functional grouping. It is misleading to say that "during 1910, 1911, and 1912, the work of installation of accounts which would show how much was spent for each 'function' or kind of work was carried forward so that by 1913 every item in the estimates and every item in the 'budget' prepared and submitted by the board of estimate and apportionment was 'functionalized.'" <sup>1</sup> And again, "from 1909 to 1913, the appropriation bill, falsely called 'the budget,' was 'functionalized to death.' In other words, the items of appropriation were each year 'segregated' in greater and still greater detail *to show the amounts authorized for each kind of work.* . . ." <sup>2</sup> It is true that additional functional and structural subdivisions were introduced, as we have already seen, but being made subordinate to the object classification, they had the effect of merely increasing detail of segregation. They did not show "how much was spent for each 'function' or kind of work"—the essence of the proposition advanced by the accountant who made the initial investigation into the department of health, and by all those who urged the introduction of a functional classification. To ascertain the cost of each function, under the present form of the budget, it would be necessary to go through the entire departmental budget and recast and sum up on a functional basis the various amounts cited under each head, personal service, supplies, etc. And even then the table would be incomplete. Some items would be missed

<sup>1</sup> MUNICIPAL RESEARCH, No. 57, page 24.

<sup>2</sup> MUNICIPAL RESEARCH, No. 81, page 8.



*DEVELOPMENT OF FORM*

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owing to the unequal extension of functional segregation under each main head.

Since 1913, there has been no important development in the form of the budget. The form attained was considered adequate for purposes of centralization of control over purchasing and contract relations. Attention thereafter turned to the improvement of administrative machinery and procedure for the proper exercise of this control—the establishment of the bureaus of personal service, contract supervision, the committee on education and the sub-committee on the tax budget.

## CHAPTER V

### THE DEVELOPMENT OF SEGREGATION

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Coincident with the transfer from the functional basis of classification to object classification, there was a movement toward greater and greater detail of segregation.

Subsequent development proceeded in the same direction, consisting on the one hand of an extension of the principle of segregation, and on the other, of more stringent rules for enforcement. As an illustration of the extension of detailed segregation, the object group "supplies," starting in 1908 as a single undivided group or even combined with "contingencies" ("supplies and contingencies") was subdivided in 1909 under the heads: "general supplies," "fuel" and "fodder." In 1913 it was further subdivided, into eleven groups: "food," "forage and veterinary supplies," "fuel," "gasoline," "office supplies," "medical and surgical supplies," "laundry cleaning and disinfecting supplies," "botanical and agricultural supplies," "motor vehicle supplies," and "general plant supplies."

The year 1913 marked the extreme in detailed segregation. Since then, there has been a reaction, general though not uniform in every department. The following table indicates the extent of subdivision under each of the main classes, "personal service," "supplies," etc., for the eight departments studied. The numbers refer to the number of "places" to which subdivision has been carried. Contingencies and fixed charges have been omitted in these tables on account of their irregularity—in some years and departments no appropriations have been made under these heads.

THE DEVELOPMENT OF SEGREGATION

EXTENT OF SUBDIVISION UNDER MAIN CLASSES, NEW YORK CITY BUDGET

	1913	1914	1915	1916	1917
<i>Correction</i>					
Personal service.....	5	4	4	5	5
Supplies.....	5	1	1	1	1
Equipment.....	3	1	1	1	1
Materials.....	3	1	2	2	..
Contract or open order service..	6	2	2	2	2
<i>Police</i>					
Personal service.....	3	3	3	3	3
Supplies.....	1	1	1	1	1
Equipment.....	1	1	2	2	1
Materials.....	1	1	1	1	..
Contract or open order service..	2	2	3	3	2
<i>President, Manhattan</i>					
Personal service.....	3	3	3	3	3
Supplies.....	4	2	2	2	1
Equipment.....	4	2	2	2	1
Materials.....	4	3	3	3	1
Contract or open order service..	5	4	4	4	4
<i>Street Cleaning</i>					
Personal service.....	3	3	3	3	3
Supplies.....	3	3	3	2	1
Equipment.....	4	3	3	3	1
Materials.....	3	1	1	1	1
Contract or open order service..	5	4	4	4	2
<i>Health</i>					
Personal service.....	4	3	3	3	4
Supplies.....	2	3	3	3	1
Equipment.....	2	3	3	3	1
Materials.....	2	3	3	3	..
Contract or open order service..	2	4	4	4	2
<i>President, Bronx</i>					
Personal service.....	4	3	3	3	3
Supplies.....	4	2	2	2	1
Equipment.....	3	2	2	2	1
Materials.....	4	2	2	2	1
Contract or open order service..	4	3	3	3	2
<i>Public Charities</i>					
Personal service.....	5	5	5	7	7
Supplies.....	3	2	2	2	1
Equipment.....	3	2	2	1	1
Materials.....	3	1	1	2	..
Contract or open order service..	3	3	3	3	2
<i>Water, Gas and Electricity</i>					
Personal service.....	3	3	3	3	3
Supplies.....	4	4	4	4	2
Equipment.....	4	3	3	3	1
Materials.....	4	3	3	3	3
Contract or open order service..	5	5	5	6	5

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Summing the departments, in order merely to arrive at single figures capable of direct comparison, we get a reduction from 136 in 1913 to 73 in 1917 as follows:

**TOTAL OF THE SUBDIVISIONS IN THE BUDGET OF THE DEPARTMENTS IN PRECEDING TABLE**

	1913	1914	1915	1916	1917
Personal service.....	30	27	27	30	31
Supplies.....	26	18	18	17	9
Equipment.....	24	17	18	17	8
Materials.....	24	15	16	17	4
Contract or open order service...	32	27	28	29	21
<b>Grand Total.....</b>	<b>136</b>	<b>104</b>	<b>107</b>	<b>110</b>	<b>73</b>

The mere statement of the number of places to which subdivision is carried does not show adequately the frequency of segregation. On the other hand, the number of times to which each degree of subdivision is carried (see page 89) does not give a true comparison, since in the earlier budgets many instances occur where subdivision effects the closer specification of the appropriation, without increasing the number of distinct sums. The heading "executive," subordinate to "administration," in the department of water, gas and electricity may afford an example:

**FOOD SUPPLIES**

*Administration*

Executive..... \$125

The following table, showing the number of distinct sums appropriated, gives a better idea of the history of segregation in the budget during the past five years. (Personal service has been omitted because each position is enumerated. The number of *schedule* lines for personal service is not a true indication of the effect of *segregation* upon the number of appropriations.)

**THE DEVELOPMENT OF SEGREGATION**

**NUMBER OF SUMS APPROPRIATED, EXCLUSIVE OF PERSONAL SERVICE,  
NEW YORK CITY BUDGET**

	1913	1914	1915	1916	1917
<i>Correction</i>					
Supplies .....	42	10	10	9	10
Equipment .....	13	7	8	7	6
Materials .....	4	3	55	12	1
Contract or open order .....	120	90	21	79	7
<i>Police</i>					
Supplies .....	8	8	8	8	8
Equipment .....	6	5	7	7	5
Materials .....	2	2	2	2	1
Contract or open order .....	9	9	11	13	7
<i>President, Manhattan</i>					
Supplies .....	17	13	16	16	5
Equipment .....	27	14	15	14	4
Materials .....	7	7	9	9	5
Contract or open order .....	32	30	30	26	12
<i>Street Cleaning</i>					
Supplies .....	32	30	16	10	7
Equipment .....	28	20	15	9	5
Materials .....	6	3	3	3	2
Contract or open order .....	45	37	34	29	10
<i>Health</i>					
Supplies .....	21	84	81	81	10
Equipment .....	21	64	67	63	8
Materials .....	10	21	20	22	1
Contract or open order .....	21	73	73	71	9
<i>President, Bronx</i>					
Supplies .....	21	9	9	13	6
Equipment .....	19	12	10	11	5
Materials .....	8	5	4	5	2
Contract or open order .....	23	22	20	20	11
<i>Public Charities</i>					
Supplies .....	44	19	17	26	11
Equipment .....	28	11	11	9	9
Materials .....	9	3	3	24	1
Contract or open order .....	44	16	13	23	7
<i>Water, Gas and Electricity</i>					
Supplies .....	36	24	24	24	10
Equipment .....	27	17	16	15	4
Materials .....	9	8	9	8	2
Contract or open order .....	120	90	77	79	53

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**TOTALS FOR THE DEPARTMENTS**

	1913	1914	1915	1916	1917
Corrections . . . . .	179	110	94	44	24
Health . . . . .	73	242	241	237	28
Police . . . . .	25	24	28	30	21
President, Bronx . . . . .	71	48	43	49	24
President, Manhattan . . . . .	83	64	70	65	26
Public Charities . . . . .	125	49	44	82	28
Street Cleaning . . . . .	111	90	68	51	24
Water, Gas and Electricity . . . . .	192	139	126	126	69
Grand Total . . . . .	859	766	714	684	244
(Total without health dept.) . . . . .	786	524	473	447	212

## CHAPTER VI

### DEVELOPMENT OF THE TERMS AND CONDITIONS

Indicative of the same factors and influences already pointed out in connection with the development of the form of the budget is the history of the development of terms and conditions imposed by the board of estimate and apportionment to facilitate the administration of the budget.

The very first rules imposed, in the 1909 budget, provided that the budget should serve as a basis for voucher control, to control contract and purchase relations, especially the hiring of employes:

- 1—"That no change shall be made by any board or head of an office, bureau or department in the city or county governments in the schedules of 'salaries' and 'salaries and wages' herein contained, except when authorized thereto by twelve (12) votes of the board of estimate and apportionment, and when such change will not increase the monthly rate of the total amount herein appropriated for the said schedules of 'salaries' and 'salaries and wages' for monthly payrolls in the different boards, offices, bureaus and departments of the city or county governments.
- 2—" (a) That the heads of the several boards, offices, bureaus and departments of the city and county governments shall prepare their several payrolls for audit by the department of finance in accordance with the items of the aforesaid schedules, entitled 'salaries' and 'salaries and wages'; and (b) set forth on said payrolls the monthly, weekly or daily pro rata expenditures of said appropriations and the total amounts expended up to the time of and including said monthly and weekly payrolls; and (c) the unexpended balance of each appropriation against which said payrolls are chargeable."

To facilitate control over the hiring of employes, supporting schedules were established in 1909 enumerating the positions and salaries or wages to be paid.

In 1909, also, voucher control was extended to cover departmental purchases of supplies, materials, etc., through the establishment of specifications. "An attempt was made to prescribe that all contracts or open market orders for the purchase of supplies, fuel, forage, etc., be based upon standard specifications and the comptroller was enjoined as far as it was possible to enforce standardisation of supply specifications."

Department heads had been carrying on a flourishing traffic in contracts and patronage. They were paying exorbitant prices, it was discovered, for supplies and materials they purchased. Some instances of this practice may be interesting:

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ARTICLE	VALUE	PRICE PAID
Galvanized boat cleats (10 inch), each . . . . .	\$.30	\$3.60
Tin dippers, per dozen . . . . .	.60	2.00
Wiping cloths, per 100 pounds . . . . .	7.00	20.00
Pet cocks, per dozen . . . . .	1.44	6.00
Iron valve wheel, each . . . . .	.06	1.50
Galvanized nickel (2½ inch) . . . . .	.18	.87
Jenkins globe valves, per dozen . . . . .	7.80	15.00
Tube cleaners, spiral, each . . . . .	.65	3.00

The rules ran as follows:

"That all appropriations for (1) supplies; (2) general supplies; (3) materials for repairs and replacements; (4) fuel, and (5) forage, to any Board, Office, Bureau or Department of the City or County governments, made in this Budget, be made under the following conditions:

"First—That, in so far as practicable, all contracts and open market orders for the purchase of such 'Supplies,' 'General Supplies,' 'Materials for Repairs and Replacements,' 'Fuel' and 'Forage' be based upon specifications which are definite and certain as to character and quality, which conform with standard specifications for the various classes of supplies, materials, fuel and forage hereafter to be promulgated by this Board.

"Second—That, in so far as such standard specifications may hereafter be established by this Board, the Comptroller, at the time of certifying as to the sufficiency of appropriations out of which contracts for 'Supplies,' 'General Supplies,' 'Materials for Repairs and Replacements,' 'Fuel' and 'Forage' are to be paid, shall also certify that the specifications for such supplies or materials for which standard specifications have been prescribed, are in conformance with such standard specifications.

"Third—That all open market orders issued by any Department for supplies or materials, for which standard specifications shall have been prescribed, shall contain a description of the goods ordered, conforming with such standard specifications.

"Fourth—That the Comptroller shall, in auditing claims for goods delivered on open market orders, determine, through inspection or otherwise, whether the goods delivered conform with such standard specifications."

The actual introduction of standard specifications was a slow process. The president of the Borough of Manhattan, George McAneny, prepared with the aid of the Bureau of Municipal Research, specifications for general supplies. In 1914 (see Part II, Chapter III), the bureau of standards undertook the task of preparing specifications for supplies.

The rule of 1908—applying to the 1909 budget—which prohibited changes in schedules (except on the authority of twelve votes of the board of estimate and apportionment), was modified in the budget for 1912, in order to enable the closer application of the rule, by drawing a distinction between labor hired by the month and that hired by the week or day. Thus, the rule in the budget for 1912 read, that—

"No change should be made . . . (a) in the case of schedules or appropriations of 'salaries, regular employes,' where the proposed change will not increase the amounts expendable in any month to more than



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one-twelfth of the total amount herein appropriated for 'salaries, regular employees'; (b) in the case of schedules or appropriations of 'wages, regular employees,' where the proposed change will not increase the amounts expendable in any week to more than one fifty-second of the total amount herein appropriated for 'wages, regular employees.' "

Section (b) was modified in the following year to read:

"In the case of schedules or appropriations of 'wages, regular employees' where the proposed change will not increase the amounts expendable in any week to more than the pro rata of the number of working days in such week to the total number of working days provided for such schedule line for the whole year."

In the budget for 1911 the rule prohibiting changes in schedules, was supplemented by a rule forbidding any transfer of funds from one appropriation or schedule to another:

- "(a) That no transfers shall be made from appropriations or schedules of 'salaries,' or 'salaries, regular employees' to any other appropriation or schedule than 'salaries' or 'salaries, regular employees'
- "(b) That no transfers shall be made from appropriations or schedules of 'salaries, temporary employees,' to any other appropriation or schedule than 'salaries, temporary employees'
- "(c) That no transfers shall be made from appropriations or schedules of 'wages, regular employees,' to any other appropriation or schedule than 'wages, regular employees'
- "(d) That no transfers shall be made from appropriations or schedules of 'wages, temporary employees,' to any other appropriation or schedule than 'wages, temporary employees'
- "(e) That no transfers shall be made from appropriations or schedules of 'compensation, temporary employees,' to any other appropriation or schedule than 'compensation, temporary employees'
- "(f) That no transfers shall be made from any of the appropriations made herein for the various kinds of supplies and contingencies to any other than to a supply or contingency account"

This rule was modified in later years only to conform to the increasing detail of budget segregation. Thus, in 1912, the title, "Vehicular Transportation" was added, and it was subdivided next year into "Transportation, hire of horses and vehicles with drivers" and "Transportation, hire of horses and vehicles without drivers." And again modified in 1914, with the addition of "Hire of automobiles." And so on.

Voucher control was made more specific by the ruling in 1910 (the 1911 budget), that "each payroll of any department, in addition to any other departmental number, shall be numbered during the year serially, beginning with number one, for each specific amount, and such payroll shall bear a certificate signed by a person cognizant of the facts, stating that the recapitulation attached thereto is the correct recapitulation for the payroll bearing said number."

And finally, to insure the enforcement of these rules, the clause was added in the 1912 budget that "no payroll shall be passed

by the department of finance, unless incumbents and the rate of individual compensation agree with such schedule lines as originally adopted or as hereafter modified by the board of estimate and apportionment," and that "wherever an appropriation under the classification of 'supplies and materials' is supported by a schedule, such schedule shall be conclusive as to the amount allowed for each function or subdivision, and the heads of departments shall submit to the department of finance on the first day of each month, or as soon thereafter as possible, a statement showing the amount of supplies and materials consumed the previous month chargeable against each supporting schedule line of the appropriation for 'supplies and materials,' which monthly amount, in the aggregate, shall not exceed the amount specified in the schedule, unless modified by twelve (12) votes of the board of estimate and apportionment." The latter ruling was extended in 1914 to cover all classes of expenditure other than personal service; and in 1915 was made still more strict as follows:

*"Resolved, That wherever an appropriation under the classification of 'Supplies,' 'Purchase of Equipment,' 'Materials,' 'Contract or Open Order Service,' 'Contingencies' or 'Fixed Charges and Contributions' is supported by a schedule all expenditures against such appropriation shall be made in accordance with such schedule and no voucher shall be passed by the Department of Finance for a sum exceeding the amount shown in said schedule, except when such schedule shall have been changed by twelve (12) votes of the Board of Estimate and Apportionment."*

This provision, of course, was omitted in the 1917 budget with the abolition of schedules in "other than personal service."

#### THE OUTCOME OF DEVELOPMENT OF THE NEW YORK CITY BUDGET

As a result of this course of development of the New York City budget, an instrument has been secured which establishes a fairly effective central control over departments in regard to the employment of the personnel and the purchase of materials. It has prevented fraud, the practice of placing on the city payroll at primary election and holiday times hundreds and thousands of unnecessary individuals, who in many cases performed no service whatever; the practice of increasing the force or salaries of higher administrative officers at the expense of repair, field, or other important necessary activities. It has established a uniform basis for audit and voucher control. And finally, it has proved of immense educative value. In the words of a report

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of the Bureau of Municipal Investigation and Statistics:<sup>1</sup> "The best results of the requirements in the departmental estimate forms devised by the Bureau of Municipal Investigation and Statistics, have been in the educational influence of these forms in the departments. The forms have given the department heads a much clearer understanding of their own requirements. A complete segregation of departmental estimates in descriptive classifications, and the requirement of detailed statements concerning expenditures from the previous budget appropriations, and the analysis of the proposed expenditure out of the coming budget, have forced the attention of department heads to the conditions in their own departments, with the result that it is easy for them to detect and to put a stop to any increase in appropriation not warranted by experience in the past or the prospects of the future."

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<sup>1</sup> Report to the Comptroller, March 4, 1912.

## CHAPTER VII

### THE STRUGGLE FOR A "COST DATA" BUDGET

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#### *Criticisms of the Adopted Form of Budget*

Although the development of the form of the budget was pretty consistently in the direction of the object classification, it was not unattended by considerable criticism. There were many advocates of the original proposition laid down by the investigator of the health department in 1907. They contended that the functional basis of classification was the only proper basis. It was urged that control exercised through limitations on objects purchased or on employment of personnel hampered the administration of departments without effecting a genuine control over inefficiency and wasteful administration. The system of control being established did not connect the cost of production of utilities with the product itself, the work done or services rendered. In other words, there was no control over performance. The budget merely acted as a preventive of fraud and graft in purchasing relations.

"Budget control, to be effective," said Mr. R. M. Chapman, in a letter dated June 14, 1907, "must relate each credit to the specific purpose to be accomplished or thing to be done, and so follow functional lines. . . . As no department is theoretically constituted for the sole purpose of paying salaries, for no other reason than to provide private incomes to the persons to whom said salaries are paid, it is obviously absurd to consider salaries as an item for exercising budgetary control; and alternatively, as all departments are charged with the accomplishment of certain specific ends, the budget control should recognize only such ends without regard to the composite elements of salaries, supplies, equipment, etc., which are purely matters of administrative control through the medium of expense accounts."

The knowledge that the fire department wants to spend \$18,500 on materials, \$21,925 on supplies, etc., in no way affords a basis for judging the services that the fire department will give to the city. Yet, how is it possible to determine upon a policy regarding support for the fire department or any other department without some such guidance? To determine upon the advisability of granting funds, it is necessary to request more proof than the mere statement of how much money will be wanted for the various classes of objects. It is necessary as a basis for judging to know the work to be done, the service to be rendered.

Similarly, the object form of classification of expenditures affords no light on the question of efficiency in administration. Even granting that a purchase is made "above board," that true value is received for the money spent, what evidence is there that the goods are to be properly utilized or that they are needed at all? There is absolutely nothing in the New York City budget to indicate that the hospital, for which 800 additional beds were purchased, had a total capacity of only 800 beds and therefore could not need so many. The budget does not provide "by segregation, by titles of appropriations, by terms and conditions, and by schedules for the control of tax levy appropriations, so that they will be expended economically for the necessary purpose of the appropriation."<sup>1</sup> The budget does not give any information regarding, for instance, the cost of feeding patients in different hospitals, such as to show that in one "the cost is 45 cents per capita, whereas in another caring for exactly the same class of patients, the price is only 19 cents per day."<sup>2</sup>

The basis for the judgment of questions of policies and of questions of efficiency must be the cost of rendering particular services or the cost of work to be done. In short, the critics rightly complained that the existing system "hampered administrative action on the one hand, while it failed to control where control is most needed."

#### *The "Cost Data" Budget Scheme*

An accounting system, such as would be necessary to serve as a basis for budget control over policies and work done, had already been developed prior to 1910 in the bureaus of highways and sewers under President Cromwell of the borough of Richmond, and later in the bureau of street cleaning, when this bureau became separate from the bureau of highways. On March 9, 1910, therefore, President Cromwell, who was much interested in the budget movement, wrote the following letter to the board of estimate and apportionment:

March 9, 1910.

BOARD OF ESTIMATE AND APPORTIONMENT,  
277 Broadway,  
New York City.

DEAR SIRS:

I beg to call to the attention of the Board of Estimate and Apportionment a matter of policy concerning appropriations and budget estimates

<sup>1</sup>*Annals*, American Academy of Political and Social Science, 1915, page 250.

<sup>2</sup>*Annals*, American Academy of Political and Social Science, 1915, page 255.

which I believe to be of fundamental importance in the administration of City business. As a result of my observations it seems that the tendency of the segregated budget is altogether too negative in effect, simply limiting expenditures, not promoting efficiency. It certainly is rather absurd to expect economy in expenditures when economy and efficiency means practically the same thing. The real question is: "What results do we produce?" not "What do we expend?"

I therefore would suggest that appropriations hereafter be considered and authorized upon the following bases:

A. Lump sum or departmental appropriations shall be allowed when founded upon unit cost data and work requirements.

B. In any department or office where such cost data is available several salary grades for the same class of work shall be established by the Board of Estimate and Apportionment so that the head of a department or office may increase or decrease wages within such specified limits, basing such action upon predetermined standards of work and efficiency records.

C. Each head of a department or office in which fundamental cost data are available shall have direct responsibility in the expenditure of appropriations, the results attained, as shown by cost records, however, being checked by some independent authority, such as the Commissioners of Accounts or the Department of Finance.

Should appropriations be granted upon the foregoing principles, the modern methods of advanced planning, standardization of duties, prompt rewards and punishment of employees for results accomplished, cost recording, cost checking and resulting economy in the expenditure of appropriations will obtain. The head of a department or office, instead of requesting larger appropriations will desire to secure greater efficiency with limited expenditures. Employees will be directly interested in securing economy, as their wages will depend upon the efficiency of the department or bureau in which they work. Salary questions will be automatically adjusted when standards of work are fixed and if prompt decreases as well as increases in salary depend entirely upon the efficiency of the individual, heads of departments or offices will have power to secure results and employees will have some incentive to better their condition. The old difficulties with lump sum appropriations will disappear when work costs and work data are available and subject to check by an independent authority. Wages will be paid for work performed instead of hours of labor, and every inducement will be offered to economize in the purchase of supplies, payments for repairs to plant and all other charges which tend to increase unit costs of work.

Instead of the present repressive methods brought about on account of the segregated budget, affirmative, progressive procedure would result when work accomplished, instead of hours of labor, formed the main basis in the appropriation of funds in the payment of salaries and in the resulting unit costs of work performed.

As most of the bureaus in my office possess work cost records, extending over a period of years, I would ask the Board of Estimate and Apportionment to authorize a test of this system for providing appropriations in the Borough of Richmond. For the purpose of securing a fair trial of this procedure, I beg to request the co-operation of the Commissioners of Accounts and the Department of Finance, to the end that budget appropriations may be arranged for the year 1911 based upon previous work cost data and future work requirements.

For the purpose of considering the possible effect of such a method and determining the feasibility thereof for the whole City, it seems to me desirable to start at once on the basis proposed, and to initiate this system in the preparation of general budget estimates for the ensuing year, it is necessary to establish the principles and details of the forms for submission to the Board in time for ample discussion. I therefore present the following resolution:

*Resolved:* That the Comptroller be requested to co-operate with the President of the Borough of Richmond in examining into and reporting

THE "COST DATA" BUDGET

on the advisability and feasibility of basing all maintenance appropriations upon work cost data.

Respectfully yours,

GEORGE CROMWELL,  
President of the Borough.

The plan briefly was to have the appropriations for each department made in lump sums. These sums, however, were to be based upon a definite program of work to be done by the department during the ensuing year. The program was to be stated in terms of quantity of work of defined kinds, and the cost estimated from unit costs for the same kind of work done in previous years.<sup>1</sup> To insure the fulfillment of the program, periodic reports were to be required from the department heads, stating the progress of the work. The central controlling agency was also to employ a staff of examiners for field inspection. To meet unexpected emergencies, department heads were to have the power to modify their program to an amount not exceeding 10 per cent for a given quarter for a specific item of work.

To prove the practicability of the new form, the estimates for the three bureaus were submitted for the year 1911 in the form proposed (See page 418 of Supplement, City Record, Thursday, October 6, 1910). The principle underlying this proposed form of budget, in the words of one of its advocates

"contemplates providing funds, not primarily for the payment of salaries or the purchase of supplies, as such, but rather for the accomplishment of work; that this work, however, involves expenditures for personal service, supplies, etc., out of the funds so provided, and that, therefore, the budget must be made to show the quantities of work to be performed correlated with the money to be spent in its performance; that the quantities of work so specified must represent the anticipated needs of the community and that the relation between work and expenditure must be based upon established standards of performance.

"The proposed form may be generally described as a budget in which there is authorized for each department lump sum appropriations to meet all expenditures incurred in the performance of definitely prescribed quantities of work. The budget proper would be accompanied and supported by schedules. These schedules would be in the nature of an explanation of the budget, and as such would provide a complete, comprehensive and logical synthesis of cost allowances, covering four quarterly periods as determined by the fiscal authorities. They would reflect in clear detail the policy of the administration with regard to maintenance and operation of the city's utilities. In addition they would serve as a standard basis for comparison with subsequent performance."

<sup>1</sup> Mr. Adamson's statement (*Annals, American Academy of Political and Social Science*, November, 1915, page 253) that "the so-called work program budget does not analyze cost data but accepts and applies the costs of this year as fixing the proper costs for the same things next year," is not an entirely complete statement of the case. Unanalyzed cost data was no part of the Richmond scheme. Owing to exigencies, lack of sufficient data, and perhaps to mistakes in definition, etc., it is true that the system as it is worked out was inadequate, but it is unfair to saddle the plan itself with the obstacles and shortcomings of its application.

The nature of the control to be exercised under this scheme would be corrective rather than anticipatory. Instead of prescribing definitely the expenditures of the departments, each department head was to be given freedom to exercise independent control over his department, but subject to check by the central controlling agency. In short, each bureau chief would become a contractor. He would undertake a specific piece of work at an estimated cost and would be held responsible for its accomplishment.

The advantages claimed by advocates of the scheme are several:

- 1—It is only by direct comparison of service rendered with the cost of rendering it that it is possible to determine upon a policy. Under the proposed scheme the work program would enable such comparison.
- 2—The requirement of a work program as a basis for requests or funds, forces the department heads to prepare careful plans. One prime requisite of success is planning in anticipation of work. The work program under this scheme is an express requirement to plan work in advance of undertaking it and thus tends directly to compel efficiency.
- 3—The centering of responsibility upon the department head for the management of his department would be still another great incentive toward efficiency. Incompetence would be more quickly revealed and competence would receive its reward. Hitherto the policy of department administrators has been to spend to the limit of appropriations without any attempt to return an equivalent of service. By making the department head wholly responsible, and by relating expenditures to service rendered, the tendency would be to reduce expenditures so far as consistent with adequate service.
- 4—The opportunity given to department heads to reward their employes for good service and to punish or discharge incompetent employes, would also establish a strong esprit de corps in the working force.
- 5—In so far as governmental structure is related to functions, classification on the basis of functions would quickly show any encroachment of one department on the field of another. The highway department might be cleaning gutters, for instance, and a depart-



ment of street cleaning doing the same work. This would immediately be exposed in the work program. Thus the proper division of duties between departments, bureaus, etc., would be brought out clearly as never before. Similarly, for some kinds of work, highest efficiency may be attained by keeping each borough distinct. In others, this would mean simply the duplication of organization. With the help of supporting data given in work programs it would be possible to find out which system was best for each particular line of work.

- 6—Finally, illegal practices would be easily detected. Such an attempt as that of President Ahearn could not pass undiscovered. Mr. Ahearn had been able to request and receive between two hundred and five hundred thousand dollars for asphalt pavement, but had spent less than \$20,000 for that purpose, the balance being diverted to labor gangs on stone block pavements. So also the practice of hiring employes for political purposes, and graft in contract and purchasing relations would be prevented.

*The Adoption of the "Cost Data Budget" for Three Bureaus Under the President of the Borough of Richmond*

On October 30, 1912, Mr. Cromwell again wrote to the board of estimate and apportionment. The secretary of the board of estimate and apportionment presented a communication to the board from the president of the borough of Richmond, submitting a pamphlet with suggestions on efficiency and economy in relation to budget methods, and also two resolutions:<sup>1</sup>

- "(a) That the budget committee be requested to report for authorization by the Board, lump sum appropriations to officers and departments which accompany their departmental estimate for 1913, with adequate statistics showing unit quantities of work done and cost therefor; and
- "(b) That the Board shall establish a bureau, composed of competent and experienced, adequately paid experts, whose constant duty shall be to study, throughout the year, the actual work of each office and department; to co-operate with offices and departments in securing greater efficiency and economy; at least quarterly to audit the accounts of work done, and to report such results to the Board for its information and guidance"

This was referred to the budget committee consisting of the comptroller, the president of the borough of Manhattan, and the

<sup>1</sup> Minutes, board of estimate and apportionment, October 3, 1912, page 4625.

president of the Board of Aldermen. The committee suggested that the president of the borough of Richmond should submit estimates covering the three bureaus of his office for the year 1913, set up in actual form on a cost data basis. This suggestion the borough president complied with on October 28, addressing a letter to the board of estimate and apportionment:<sup>1</sup>

"Gentlemen:

"Following the suggestion of the Budget Committee, I beg to present herewith for your information and attention appropriations covering three bureaus of my office for 1913, which appropriations I have caused to be set up in actual form on a cost data basis.

"Attached thereto will be found supporting schedules or work programmes, list of positions and grades to be established and resolutions governing the administration of the appropriations and schedules so set up.

"The totals of these appropriations are identical with the amounts as recommended by the Budget Committee in the Tentative Budget.

"Without attempting to discuss herein the advantages of a cost data budget which were briefly outlined in my communication to the Board under date of October 3, 1912 (Calendar, October 10, 1912), I would respectfully request your earnest consideration of the advisability of granting these appropriations in the above form in order that a conclusive experimental test of the merit of such a plan may be conducted in the Borough of Richmond during 1913.

Yours respectfully,

GEORGE CROMWELL,  
*President of the Borough of Richmond.*"

The proposal naturally met with very great opposition. However, the board of estimate and apportionment eventually decided to try the experiment. On October 31, 1912:

The Deputy and Acting Comptroller presented the following:

WHEREAS, A request has been made by the President of the Borough of Richmond that funds for the division of highways, street cleaning and sewers of that Borough be appropriated in lump sum on what is described as a cost data basis; and

WHEREAS, It is claimed that greater efficiency of result can be obtained in these divisions if no restrictions in the form of salary schedules are imposed upon appropriations granted for these purposes; and

WHEREAS, A definite program of work has been submitted by the Borough President for the divisions in question, which it is proposed to enforce through monthly and quarterly reports, and by inspection by agents of the Board of Estimate and Apportionment; and

WHEREAS, It is proposed to establish a division of efficiency in the Board of Estimate and Apportionment in the year 1913 which will be equipped to make such inspection; therefore, be it

Resolved, That this Board, for the purpose of experimentation, grant funds to the Borough President, as requested, without the segregation employed in respect of all other appropriations of the Budget, and as set forth in the Budget for 1913; and be it further

Resolved, That this experiment does not bind the Board to a continuation of the so-called cost data system of appropriation, and that this Board hereby emphatically reaffirms its belief in the efficacy in the form of segregated budget now employed in preventing waste or misuse of funds, and in the continuance of the present form until the proposed change shall have amply demonstrated that it does actually secure greater

<sup>1</sup> Minutes, board of estimate and apportionment, 1912, page 5029.

THE "COST DATA" BUDGET

economy in administration, and in no respect opens the way to extravagance or to the use of funds for purposes not specifically stated in the estimate and not specifically approved by this Board.

Which was adopted by the following vote:

Affirmative—The Mayor, the Deputy and Acting Comptroller, the President of the Board of Aldermen and the Presidents of the Boroughs of Manhattan, Brooklyn, The Bronx, Queens, and Richmond—16.<sup>1</sup>

On December nineteenth, the board, on the motion of the president of the board of aldermen, empowered the budget committee to proceed with the organization of the proposed bureau of efficiency and to report to the board a general plan for organization at the meeting of January 9, 1913. The report was subsequently made and came before the board on January twenty-third,<sup>2</sup> but was laid over to the next meeting and to the next, for six successive times. On March 13, 1913, the board finally established the efficiency and budget advisory staff:<sup>3</sup>

The following resolution was offered:

*Resolved*, That the Board of estimate and apportionment hereby approves and adopts the report of the Budget Committee of this Board, presented under date of March 5, 1913, in respect of the functions and organization of the proposed Division of Efficiency in the Board of estimate and apportionment; and be it further

*Resolved*, That the Budget Committee of this Board be and hereby is directed to prepare a list of persons to be employed in the division under the jurisdiction of this Board, and, in so far as possible, that it obtain a transfer of men now in the city employ to the said division; and be it further

*Resolved*, That the Budget Committee be and hereby is authorized to take such steps as in its judgment may be necessary to obtain competent employees for the work of the division and that it be and hereby is authorized to arrange the employment of such persons, provided such employment shall not become effective until approved by this Board; and be it further

*Resolved*, That the Budget Committee be and hereby is authorized to make suitable arrangements for such office quarters, equipment, etc., as may be required for the use of the said division.

The following July, Mr. Welton was appointed as chief of the efficiency bureau and by the middle of August the entire staff was organized and the work began. The efficiency and budgetary advisory staff had two functions, inspectional and advisory. It was required to observe the operations conducted by the three Richmond bureaus to see that they complied with the established program and it was to assist the three bureaus in installing accounts, time card systems, the compilation of records, the working out of definitions, and specifications, etc., which would be necessary for the success of the proposed budget scheme. In the words of the plan laid out by the budget committee:

<sup>1</sup> See Minutes, board of estimate and apportionment, Oct. 31, 1912, page 5791.

<sup>2</sup> See Appendix "D".

<sup>3</sup> Minutes, board of estimate and apportionment, March 13, 1913, cal. No. 11, page 1974.

"We submit two major divisions of work for the proposed Efficiency Division:

"1—Observation of work performed under the so-called cost data budget, as provided for certain departments in the Borough of Richmond for the year 1913.

"Under this plan it is proposed that the Board of Estimate and Apportionment shall exercise control over the expenditure of these appropriations to the extent of requiring that the work performed under them conforms with the plan submitted by the Borough President, and authorized in the Budget. To this end it is proposed that the Efficiency Division report to the Board at regular intervals of not less than once every three months, the quantities of work performed in the several divisions for which cost data appropriations have been made, the unit costs thereof, and the degree to which the results accomplished conform with the program laid down in the Budget for 1913.

"In addition to the foregoing, we suggest that for the year 1913 the efficiency division devote its attention:

"2—To studying and suggesting methods for improving the efficiency of work performed in the several boroughs of the city in: (a) Care and maintenance of highway systems; (b) care and maintenance of sewers; (c) care and maintenance of public buildings and offices; to studying and making recommendations respecting efficiency of work performed in the (a) Maintenance of parks throughout the city, especially in respect of the employment of labor gangs; (b) construction and maintenance of docks and other waterfront improvements; (c) maintenance of existing water supply systems; (d) cleaning of streets, collection and removal of garbage and other waste material.

"It is proposed that the foregoing studies relate particularly to the actual field work performed in respect of the various functions enumerated, and cover such matters as the supervision and organization of labor gangs, methods employed by labor gangs, and equipment and materials used in the execution of work.

"In all of these studies we recommend that the Efficiency Division give its attention primarily to the efficiency of methods of work employed by labor forces in contradistinction to the administrative organization of the department in question.

"We further suggest that the division make such other studies and reports as may be directed by the Board of Estimate and Apportionment."

In a letter to President Cromwell, dated August 19, 1913, Mr. Welton states that he is ready to start the preliminary investigation and asks for credentials for the examiners.

#### *The Installation of the New System*

The detailed description of the task of the efficiency staff during the beginning of its operations would be a treatise in itself and would belong to the field of accounting and engineering rather than to public finance.

It was found that whereas the bureaus had been keeping "cost data" for a number of years, these data were far from accurate. The organization and management of the bureaus also would need to be modified for the successful application of the new budget system. The preliminary work of the staff, therefore, consisted in the improvement of the accounting system and of the

organization and procedure within the offices, rather than the mere application of the new principle of budget control to offices already prepared to receive it.

Some idea of the magnitude of this preliminary work can be obtained from a brief outline based on Mr. Welton's report of November 17, 1914.

*Definitions.*—In the first place, "to permit of proper administrative control, the work performance was subdivided into certain elementary and narrowly differentiated classes which at once defined the character and extent of this work, and furnished an easy means of identification for purposes of record and ready reference."

This analysis required accurate definition of not only the elemental operations, but also of the objects to be treated. "Cleaning gutters," for instance, involved not only the differentiation of sweeping, loading and hauling, but also a clear-cut definition of what a gutter is—as where, in the case of a street macadamized from curb to curb, the street paving ends and the gutter begins.

*Field Survey.*—A survey was made of all streets under the jurisdiction of the bureaus showing:

- 1—Dimensions of areas
- 2—Character of abutting property
- 3—Existence or non-existence of certain special features as
  - a—water mains
  - b—street lights
  - c—sewers
  - d—street railways
  - e—the grade of street
- 4—Amount of traffic—light, medium, heavy or very heavy
- 5—Condition of pavement
- 6—Legal status

*Cost Data.*—From such records as existed in the bureaus, from general engineering practice and the experience of other boroughs, preliminary cost data were developed. The determination of the prime unit cost involved "a study of the most effective organization of a gang, for the particular class of work, and its cost per day; the equipment required by that gang, the cost per day, and its mechanical capabilities; the sorts of material used, the purchase price, burden charges which can be directly allocated to each (such as charged for transportation and handling) and

the total quantity of each required per unit of work; and the output per gang day for that particular kind of work."

In addition to ascertaining the "prime unit cost," or the cost of operations as such, the "expense burden"—the cost of the overhead organization, the permanent plant and equipment—was estimated and distributed over the individual classes of operation.

*The Work Program and the System of Report and Record:*—From the information collected and the definitions and specifications established, a program of work to be done was prepared and the cost determined to serve as a basis for the budget request. To keep check of the actual accomplishment of the work and its conformity to the program and in order to distribute the work properly from day to day, an elaborate system of records was planned. Colored cards with code numbers to be used in the Hollerith machine were used, blue cards for one type of record, green for another, yellow, and white. There were special forms for weekly reports, special forms for daily reports, and so on.

*Field Audit:*—And finally the work actually being carried on was inspected by staff examiners.

#### *Failure of the Scheme*

The experiment met with obstacles and reverses from the outset. On January 1, 1914, President McCormack was elected in place of President Cromwell. The new borough president was little interested in the budget reform movement. Although at first not directly opposed to it, he did not back up the experiment with the weight of his authority.

Five months later the undertaking received a second blow when the efficiency and budget advisory staff was transferred from the board of estimate and apportionment to the commissioner of accounts. By this move the staff lost the weight of authority of the board of estimate and apportionment. The plan had originally contemplated making the reports of the efficiency staff serve as a check upon the quarterly reports of the borough president. By having the staff report to the commissioner of accounts, however, this part of the scheme was completely nullified. However, members of the staff, enthusiastic and confident of the urgency and value of their work, decided to continue the undertaking.

They were immediately met by new hindrances. "An obstructionist attitude," writes an examiner in a report dated November

19, 1914, "has been plainly assumed all along by certain of the subordinates against the efforts of the efficiency staff to introduce a system of work control and method of cost keeping." Even before this there was little co-operation between bureau officials and examiners.

The bureau chiefs complained that they were caught between two fires. Both systems of budget control were being applied at the same time. The comptroller compelled the submission of the estimates in accordance with his forms, which controlled appropriations by objects of expenditure and specified the number of men to be employed. The efficiency staff attempted to control by function or work done. Whatever elasticity properly belonged to one system of control was eliminated by the other.

Moreover, the field inspection, especially by an outside agency, was thoroughly disliked. This is clearly indicated in a letter from President McCormack himself to City Chamberlain Henry Bruère, January 27th, 1915:

"Dear Mr. Bruère:—

Acknowledging your letter of 19th inst. Respecting the continuance of Mr. Welton's staff on the physical audit work in this borough, would say that I desire to conduct the activities of the three bureaus (street cleaning, sewers and highways) of this office operating under the cost data budget directly through my own employes. However, I will be pleased to have one, or possibly two, of Mr. Welton's staff render whatever assistance may be necessary to those employes recently appointed by me for the purpose of getting these men started and familiarising them with this class of work. I am satisfied that better results can be obtained in this way than we had last year, through the duplication of supervision of the work in the field by the efficiency and advisory staffs.

Yours sincerely,

(Signed) C. J. McCORMACK."

That this interference should have been resented may be easily understood from the irregularities disclosed in the examiner's reports. A few instances will suffice.

*Waste or Unnecessary Work:*—January 11, 1915: Work Order No. 5290—"Replacing bridge washed from Meadow Brook into Creek. This bridge is at the end of Water Street, which is shown on the map as stopping at the brook. This bridge leads to a salt meadow and, according to the residents of this section, is used only by a very few pedestrians in summer. Easy access to this meadow is provided at a point about 300 feet back from the bridge, making the bridge unnecessary. This work therefore is of doubtful propriety."

February 6, 1915: "Gang clearing snow and ice from dish gutters on Manor Road at and near Ocean Terrace. This is a suburban location—not much traffic—and the work is of very doubtful necessity."

*Inefficient Management:*—January 11, 1915: "Foreman Grant, transferred from the construction bureau to the bureau of highways, was carried on the payroll unassigned to any work and spent most of the time sitting in the office."

"One gang cleaning open drain on private property at Castleton Avenue near Caroline Street, the material was frozen hard. This work, if proper to be done at all, should be done when the material is not frozen."

January 18, 1915: "Gang erecting new guard rails on Martling Avenue, requiring the digging of post holes through 2 and 2½ feet of frozen ground, should be done when the frost is out of the ground. Work is not urgent."

February 2, 1915: "The past week there have been fifteen (15) foremen on the payroll; previously only nine (9). There is not enough important work at present to justify the use of so many foremen."

"Much of the work is also unnecessary. For instance, cleaning gutters on Castleton Boulevard. This is a wide dirt street practically level, with paved gutters; very little traffic. Filling ruts in macadam road with ½ stone. This work is unwise at this time as the material will not bond in with the rest of the road."

February 6, 1915: "Two sewer gangs working for street cleaning bureau on snow removal not supplied with enough teams to keep the men busy, resulting in considerable loss of time."

February 20, 1915: "Approach to Chelsea Avenue bridge being built up with ¾ and ¾ inch stone to maximum depth of 8 to 10 inches; rolled dry with light horse roller with the result that the pavement is unbonded, producing a rough and loose surface; wagons already forming ruts in it. Should have had screenings or other fine material added; should have been sprinkled and rolled with heavier roller."

"The tendency is increasing to split gangs into two or more sections working at widely separated locations, resulting in lack of proper supervision of men. For instance, part of Blauth's gang working at Fresh Kills and Annandale Roads with rest of gang over three miles away on Nelson Avenue."

April 10, 1915: "Richmond Turnpike, from Bull's Head to Union Avenue. This is bituminous treated road full of 'pot holes' of various sizes. These holes were filled up five or six weeks ago with ¾ inch stone and screenings tamped dry. This material has now been entirely picked up by the traffic, exposing the holes in the same condition as previously. The work done was, therefore, entirely wasted. This repair should have been made with tar binder."

*Illegals:*—January 18, 1915: "Work under this Bureau (Bureau of Sewers) has consisted mostly of cleaning open drains on private property; legality doubtful."

March 6, 1915: "Belair Road from Tompkins Avenue to Dead End West, regrading with cinders, shaping up sidewalk spaces and forming gutters. This is a private dirt road, has never been accepted by the city and work thereon is therefore illegal."

March 20, 1915: "Goff Avenue running to Dead End, surfacing with oyster shells hauled from beach about one mile away."

"Quinlan Avenue, work of surfacing with cinders resumed from point where same work was suspended in February; cinders being obtained from street railroad company, delivered at Quinlan Avenue in flat cars."

"Clifton Avenue, southwest of Tompkins Avenue, surfacing with cinder."

"All of the above named are dirt streets; above work changes the type of pavement and is therefore illegal."

April 3, 1915: "Surfacing the following private streets with cinders: Short dead end street running south from Clinton Avenue, one block west of Center Street"

Beach Street, Mariner's Harbor  
Columbus Avenue, running out of Beach Street

Clifton Avenue, Rosebank, west of Tompkins Avenue."

April 10, 1915: "Cleaning gutters on Fiedler Avenue leading out of Richmond Turnpike at Tompkinsville. This is a private street with practically no traffic. Work is unnecessary even if it is legal."

April 19, 1915: "Repairing wings on the following dirt streets (Dongan Hills)—"

Davis Avenue  
Whitaker Place  
Vistol Avenue

"These streets have never legally been accepted by the City, although the Bureau of Highways has done work on them in previous years."



THE "COST DATA" BUDGET

April 26, 1915: "Atlantic Avenue, Dongan Hills, Turnpiking. This street has never been legally accepted by the city."

The difficulties resulting from this hostility on the part of bureau officials appear in the examiner's reports from time to time. In a report written July 15, 1914, complaint was made that owing to the reluctance and lack of interest on the part of the bureau most of the work of taking inventories fell upon the efficiency staff.

"Inspector Dennys (11/19/14) forbade the foremen whose work he was supervising to furnish the efficiency staff examiners any information whatever." The superintendent rectified this the next day, to be sure, but on January 18, 1915, we read another report "Bureau of sewers and bureau of highways, on the orders of the borough president, have ceased to make out efficiency staff copies of work orders, and also ordered the employes of these departments not to give the efficiency staff any information either written or verbal and to deny the staff access to the reports."

It was impossible to obtain any assistance from the borough president who was ill at that time. Not until the following July or August was his permission finally given to use the data needed.

Memo, January 25: "Mr. Bailey, the superintendent, has requested that I give up my desk, claiming that it is needed by the employes of the bureau of highways."

Letter to Mr. McCormack, February 18: "Nearly one-half of the first quarter has elapsed and no schedule has been forwarded by the bureau of highways needed to comply with the resolution of the board of estimate, and also for the bureaus themselves to definitize their plans."

Shortly after this, President McCormack died, and President Van Name succeeded him. Immediately, the suggestion was made by Alexander Brough, the deputy enacting comptroller, and H. H. Curran, acting president of the board of aldermen, that the Richmond experiment be discontinued on the grounds that "possibilities of salary increases in the cost data budget, constitute a very unfair discrimination against employes in other departments where there are no such possibilities." It had indeed been found in practice that salary increases could easily be granted, but that it was an entirely different matter to reduce them. This was especially objectionable since no control could be exercised until the end of the year.

Mr. Adamson wrote that "for four years an experimental cost data budget has been made for the Borough of Richmond. This budget has proved a failure and is to be abandoned next year at the request of the borough president." As it stands, this is a rather misleading statement of the case. Mr. Adamson's suggestion is

that the experiment failed through inherent shortcomings of the proposed form of budget itself. However, other reasons may be found for its failure.

(1) In the first place, the board of estimate and apportionment had never taken any degree of interest in the experiment or felt its responsibility towards the enforcement of the rules. It entirely disregarded the quarterly reports on the progress of the work, in spite of obvious discrepancies between these and the original programs.

(2) The departments themselves were hostile and naturally disliked the interferences of the efficiency staff.

(3) The task of introducing the new system was necessarily slow and arduous. Immediate results were consequently far below expectations. The system of records was difficult and complex. The reports were consequently badly delayed and inadequate—so belated as to fail of their purpose of affording control over expenditures. Moreover, the work of the efficiency men was adversely criticized in regard to bases of measurement, the units for unit costs, etc.

(4) And by the time the efficiency staff had gotten fairly under way, a process which in all pioneering work is necessarily slow, it was stripped of all power to enforce its recommendations. The authority which it had possessed at first, as subordinate to the board of estimate and apportionment, was destroyed when the staff was transferred to the commissioner of accounts' office, which itself is subordinate to the mayor only.

Where the staff did receive adequate support the experiment appeared to be successful. Mr. Fetherston, head of the bureau of street cleaning, was a warm advocate of the new budget system. It is noteworthy that by 1915 the weekly reports of the examiners almost invariably returned for the bureau of street cleaning "no irregularities noted." Also, in his quarterly report (June 10, 1914) President McCormack states that as a result of the work of the efficiency staff the following reduction was made in force of bureau of sewers:

Laborers and sewer cleaners	from 47 to 9	
Foremen	from 7 to 2	
Drivers	from 8 to 4	
Inspectors	from 3 to 2	
Clerks and stenographers	from 2 to 1	
	67	18
Total		or a reduction of 70% in the number of employees, amounting to \$20,000 in the budget.

It was found that appropriations had been made hitherto for work not actually carried out. The alleged experience of several preceding years, shown by official record in the bureau of sewers, called for an expenditure of \$14,225. Actual experience under the cost data system reduced the amount to \$7,628—cut the customary appropriation almost in half.

In short, the scheme was initiated with reluctance and forced upon hostile departments; the staff concerned with its introduction was poorly supported by the central controlling authorities; and before the preliminary pioneer work was fairly completed, the entire experiment was quietly snuffed out. It is not possible, therefore, to judge the true success or failure of the Richmond cost data experiment. The lesson to be derived from the failure of the Richmond scheme is not necessarily that the cost data budget plan is in itself impracticable, but that it requires a different and more highly developed system of accounting and better departmental organization than at present exists.

## PART IV

### COMMENTS AND CRITICISMS

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#### CHAPTER I

#### CRITICISM BY DEPARTMENT HEADS

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No system of budget control can be without its critics. Some of these are idealists, perfectionists, to whom any plan is objectionable that has to be warped to fit the imperfections and contradictions of actual conditions. Others are men with pet theories, which they desire to see put into practice. Still others are men with vested interests, who see their own welfare bound up with one system or another.

Although the New York City budget is no exception to the general rule, we shall confine ourselves to the criticisms of the persons who are most immediately interested: the department heads, the central authorities, the board of aldermen, and the general public.

##### *Complaints of Department Heads*

The chief interest of the department head naturally rests in freedom in the administration of his department. He is impatient of any limitations on this freedom. If it is necessary that he should be restrained in the amount of money he spends for the work of his department, he believes that at least he should be left free to use that money as he sees fit, not as some outsider prescribes. The outsider cannot have the grasp of the particular problems of the department or sympathy with its undertakings. To be controlled in the administration of his department, is to reduce the department head to the position of a chief clerk.

In order to obtain sufficient freedom of action under the present system of budget control, many department heads are forced to adopt loose practices, "When I am hampered by any petty technicality, I just hurdle over it," said one official very frankly. But restrictions that encourage open violation cannot be wise.

Too rigid central supervision frequently makes for extravagance, in so far as it drives the departmental authority to ask for the maximum appropriation possible in order to have "room to turn around in," and encourages him to spend all he can, even

where he knows such expenditure is not necessary, in order to have a precedent for the next year. If he fails to spend the total appropriation granted him and nevertheless manages to get along without serious difficulty, the next year's appropriation will surely be pruned down by just so much and his "elbow room" be restricted to that extent. The department head who wants to manage his own department under the existing system sees it as his interest to ask for even more than he can hope to get, to spend all he does get, and where limitations do press upon him to "hurdle" them if he can.

Removal of responsibility and spreading it over a number of agencies, destroys the stimulus to efficiency and laxity and extravagance are often the results. To obtain true economy and efficiency of management, it is urged, the official must be given responsibility. Locate the entire responsibility upon him and he will rise to meet it, or, if inefficient, he will be promptly ousted by public pressure.

#### *Evidence of Inelasticity under the Present System*

Evidence of rigid restraints under the present system is not lacking. As we have seen in Part III, Chapter III, money cannot be spent by department heads for purposes other than those for which it was appropriated without the consent of the board of estimate and apportionment. This consent is requested formally, the transfer voted upon by the board according to due process and the comptroller duly notified of the action taken. Each action is recorded in the minutes of the board of estimate and apportionment. Quarterly reports are also made by the comptroller to the board of estimate and apportionment summarizing the transfers. During 1916, \$780,717 was transferred—\$351,772 from 1915 appropriation accounts to 1916 accounts, and \$428,945 from one 1916 appropriation account to another.<sup>1</sup>

In one department alone 97 modifications were requested involving a total of \$6,155, an average of \$63 each. With small surpluses, in say, thirty separate accounts, amounting in total to several thousand dollars perhaps, it would require thirty transfers and the consequent delay entailed in the investigation of the propriety of the transfers to apply this money to any considerable undertaking.

<sup>1</sup> Minutes, board of estimate and apportionment, April 28, 1916, Cal. No. 72, p. 2203; July 27, 1916, Cal. No. 188, p. 4612; December 8, 1916, Cal. No. 118, p. 8143; February 15, 1917, Cal. No. 52.

Emergencies and deficiencies in appropriations are met not only by transfers of surplus funds from other accounts, but also by the issuance of "special revenue bonds," that is, temporary loans to be met by the next year's taxes. During 1916 a total of \$10,047,153 worth of special revenue bonds were issued to the departments.<sup>1</sup>

*Recommendations That Have Been Offered*

Various suggestions have been offered with a view to giving departments greater freedom in administrative action:

(1) Greater "leeway" can be obtained without changing the present terms and conditions simply by cutting out the detailed segregation. The finer the segregation, the more likelihood that slight variations in one direction or another will necessitate transfers from one schedule to another. Under the lump-sum form of appropriation, increased demands on one side may be met by economy in other directions without involving formal proceedings by the board of estimate and apportionment.

A movement has been actually made in this direction in the 1917 budget. As we have seen, most appropriations for supplies, materials and equipment are granted under subdivisions carried only to the first instead of to the second or third place as previously.

(2) Another suggestion offered is to appropriate in detail as hitherto, but to allow freedom to transfer from one appropriation to another to an extent of perhaps 10 per cent of the appropriation from which the transfer is to be made. Changes in excess of 10 per cent would have to be passed upon by the board of estimate and apportionment. This scheme would afford sufficient elasticity for legitimate administrative purposes, but would leave the reins of control still in the hands of the central authorities. Such a plan formed part of the Richmond cost data scheme already described in Part III, Chapter VIII.

(3) A third plan that has been advanced from time to time, is to establish a surplus fund for emergencies, that is, a fund in excess of the actual appropriation, which could be tapped to meet unforeseen exigencies. But this scheme has hardly been considered seriously, since the difficulty of ascertaining exactly what would constitute an "emergency" is obviously insurmountable. The surplus fund would be exhausted too quickly and shortly would come to be regarded as part of the regular appropriation.

<sup>1</sup> Minutes, board of estimate and apportionment, April 28, 1916, Cal. No. 72, p. 2203; July 27, 1916, Cal. No. 188, p. 4612; December 8, 1916, Cal. No. 118, p. 8143; February 15, 1917, Cal. No. 52.

## CHAPTER II

### ARGUMENT OF THE CENTRAL AUTHORITIES

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Diametrically opposed to the attitude of the department heads, is that of the central authorities. Their argument consists, on the one hand, in a denial of the objections cited above, and on the other, in the advocacy of an entirely different theory of governmental organization.

The contention that any appreciable inelasticity exists under the present system is flatly denied. "It takes only a few days, less than a week," they say, "to get an application for a transfer 'through,' and if the case requires immediate action, the department head can take the responsibility and get the transfer approved afterward. Statistics on the number or amount of transfers, and so on, do not prove anything regarding the real elasticity of the system. They are merely indicative of limitations of human foresight; nothing more. Few department heads complain, and these object chiefly because of the check put upon the highly idealistic schemes which they are anxious to try out." The danger of such idealistic schemes, the central authorities believe, is an argument in favor of a system of centralized supervision. Department heads are too apt to be idealists, they say, unfettered by considerations of actual conditions.

Moreover, advocates of this departmental freedom—decentralization—neglect one very important factor. They supplement their plan by prompt removal for inefficiency or mismanagement. In actual practice this would be well-nigh impossible. It has been found useless to expect removal of department officials except on the most extreme charges, such as fraud, bribery, etc. Appointments are determined by politics. Political considerations are too powerful a factor to be overridden by considerations of mere inefficiency in management.

As for the objection that close supervision stimulates padding of estimates and extravagance in expenditure, the cure for these evils lies in the direction of improved accounting practice, the development of accurate cost accounts, field audit, etc. These evils, too, are offset by the accumulation of "accruals." All money appropriated but not expended is returned to the "general fund for the reduction of taxation." In a report dated June 6,

**ARGUMENT OF CENTRAL AUTHORITIES**

1916, concerning transfers of unencumbered balances of appropriations to and from the general fund, it appears that in 1908, before the adoption of the "schedule plan" (See page 107), only \$314,760.77 of encumbered balances in appropriation accounts for salaries and wages were available for transfer to the general fund, while since then an annual average amounting to over one and one-quarter million has been available:

1908 .....	\$ 314,760.77
1909 .....	1,081,784.34
1910 .....	1,958,730.67
1911 .....	1,282,351.34
1912 .....	1,404,062.44
1913 .....	920,798.41
1914 .....	1,402,517.39
1915 .....	920,188.94

In articles published in the *Record and Guide* and republished in MUNICIPAL RESEARCH, Dr. Frederick A. Cleveland shows the results of economy in municipal expenditures since the introduction of effective centralized control. Without following through the analysis, it will be sufficient merely to reproduce the following tables (MUNICIPAL RESEARCH No. 81, page 30):

**RATES PER CENT OF INCREASE IN BUDGET APPROPRIATIONS FOR DEPARTMENTAL EXPENSES OF ADMINISTRATION, OPERATION AND MAINTENANCE**

1903-1908 (inclusive), average annual increase .....	6.64
1909-1914 (inclusive), average annual increase .....	4.74
1914-1917 (inclusive), average annual increase .....	1.23

**ANNUAL RATE PER CENT OF INCREASE IN BUDGET APPROPRIATIONS FOR DEPARTMENTAL EXPENSES OF ADMINISTRATION, OPERATION AND MAINTENANCE**

1903 .....		1911 .....	.51
1904 .....	5.74	1912 .....	8.38
1905 .....	4.66	1913 .....	4.34
1906 .....	6.07	1914 .....	4.13
1907 .....	8.46	1915 .....	-1.15
1908 .....	8.27	1916 .....	-1.24
1909 .....	5.90	1917 .....	8.63
1910 .....	6.35		

The central authorities advocate centralization as opposed to decentralization. Centralization, they contend, makes for efficiency on the one hand, and for responsiveness and responsibility on the other. It enables uniformity of policy and co-ordination of action without which there can be no efficiency. The placing of responsibility upon department heads diffuses responsibility for action. It has been urged that by decentralization department heads are made all the more responsible for the administration of their particular departments but in answer it may be said that the department head is not in the public eye. Few people know the names of department executives. Everyone knows of



the mayor, and, as a body, the board of estimate and apportionment and without the influence of public opinion, responsibility and responsiveness are inoperative.

The aim of the central authorities is to develop a distinct line and staff organization. The board of estimate and apportionment should perform the functions of a staff, it should outline and control policies. The department heads would belong to the "line." They would be managers, whose duty it would be to carry out the policies. The budget would be of the nature, therefore, of a policy-determining instrument.

CHAPTER III  
CRITICISM BY BOARD OF ALDERMEN

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The board of aldermen views with increasing jealousy and concern the steady growth in the control exercised by the board of estimate and apportionment. It contends that the true functions of the board of estimate and apportionment and those of the board of aldermen are co-ordinate, that the board of estimate and apportionment is acquiring an extra-legal authority, which was never intended by the framers of the charter. Their intention, it is urged, was to have the board of estimate and apportionment prepare the budget, and the board of aldermen grant the funds. The executive side of government, the spending officials, should request funds, while the aldermen should hold the purse strings. Such a system would be in imitation of that which was historically developed in England during the struggle for power between the monarch and the people.

This idea seems to have been in the mind of the finance committee of the board of aldermen in 1906, when it stated in its report, "The board of aldermen is the direct representative of the people of the city, with the duty to carefully inquire on the behalf of the people into the propriety and reasonableness of the allowances of the amounts of the people's money proposed to be made." The implication being that the board of estimate and apportionment is not the direct representative of the people with the duty of looking after their interests.

The problem of what the charter framers intended, however, is a difficult one. The limitation of the power of the aldermen to the reduction of appropriations only and the shortness of the period allowed for investigation, do not suggest equal importance of functions. Were not these limitations, it may be asked, rather intended to prevent a mere duplication of work on the part of the board of aldermen?

In 1915, indeed, the finance committee of the board of alder-

men itself,<sup>1</sup> recognizing the duplication of work<sup>2</sup> of the two boards, suggested a new theory. "The committee believes it to be the design of the city's charter that the board of estimate and apportionment should make the budget, and that the opportunity for subtraction that is offered to the board of aldermen is not intended for exhaustive consideration of each budget item, but primarily to give the latter board a chance to correct obvious mistakes and to disagree with matters of municipal policy as reflected in the budget appropriation."

Mayor Mitchel warmly approved this view of the matter. "It seems to me," he said<sup>3</sup> "that this is a very fair statement of the proper function of the board of aldermen in connection with the annual budget," and forthwith vetoed all the recommendations of the board. For it is very doubtful whether there is the slightest possibility of any "obvious mistakes" creeping into the budget as passed by the board of estimate and apportionment, and especially doubtful whether the finance committee in the short time at its disposal and inadequate facilities for investigation could discover errors committed by the board of estimate and apportionment with its four months' investigation by expert examiners, subcommittee and main committee. And on the other hand, it is probable that as regards "matters of municipal policy" the board of estimate and apportionment is as anxious to please the public as the board of aldermen.<sup>4</sup>

<sup>1</sup> This committee was a Fusion committee, however, which would naturally tend to sympathize with the administration.

<sup>2</sup> The denial of duplication by the committee of 1906 is self-evident proof of the duplication it so strenuously denies: "At the hearings the questions asked were not so much for the purpose of learning (as at the earlier board of estimate and apportionment hearings) what the money was wanted for, but of ascertaining the specific purposes to which the department heads intended to put the allowance made."

<sup>3</sup> Veto message, December 14, 1915.

<sup>4</sup> As this was being written a letter was sent by Dr. F. A. Cleveland of the Bureau of Municipal Research to President Dowling relative to further modification of the proposed charter amendment "the Foley Bill" (See Appendix "E") before the Senate, with suggestions which, if adopted, might very well effect the relations between the two boards. The letter, dated March 22, 1917, reads in part as follows:

"May we suggest a further modification of Senate Bill No. 367 bearing on budget procedure in the City of New York?

"We fully understand the conditions that led to the proposed modification of section 226 of the charter. The setting back of the hands of the clock on the last day, the signing of an appropriation bill that was in draft and which required no less than a week to have printed in order to get it in shape for consideration—all of the things that make for disorder and unintelligence connected with the last-hour acts of the board of estimate would be corrected by the amendment that is proposed.

CRITICISM BY ALDERMEN

"In our view, however, something more should be done. Our thought is that the only way that we will ever get an effective budget procedure in the City of New York is to provide a means whereby the estimates can be taken promptly to the board of aldermen as soon as they are submitted, which under the law as it stands would be September 10th. Clearly distinguishing the 'departmental estimates' from the 'budget' (recognizing the budget as a plan of financing which takes into account on the one side the needs of the departments, and on the other side the means of raising funds), the board of estimate whose duty it is to prepare a budget could then have forty days, even under the bill as amended by you, within which to get ready such a plan. Such a procedure would of course make it necessary for the elected executives carefully to review the departmental estimates and be ready for presenting them, with all of the evidence necessary to make good their requests, before September 10th.

"Thus while the board of aldermen as an independent reviewing body is interrogating the heads of departments and discussing the various details of the service and its needs, the board of estimate and apportionment could be thinking about next year's financing. It could evolve a definite plan which could be formally submitted as a budget with supporting finance bills as indicated under the provisions of the act as it stands or as amended by the Foley bill.

"Such a change in procedure as is here indicated would involve no structural readjustment whatever. The members of the board of estimate and apportionment now have a right to sit with the board of aldermen and to participate in their discussion. True, this is a thing that they have never done and never will do under the present procedure. Nor would the amendment as now proposed in Senate Bill No. 367 bring about such a result.

"The suggested further amendment which we are indicating in the re-draft, copy of which is attached, would put the elected executives of the city in such a position that they would of necessity and in self defense carefully review the estimates of their subordinates and would be ready to present them for criticism by the board of aldermen as an independent representative body before September 10th. In other words, the elected executives would utilize their various staff facilities for going into the estimates prepared by spending officers before they would be required to stand up before the board of aldermen and publicly defend their proposals in the face of any opposition that might develop there. What now goes on between September 10th and November 1st, therefore, would have taken place before the estimates were submitted, so far as the executives themselves were concerned; and between September 10th and November 1st there could be a real hearing in a regularly constituted public forum of the government—that is, a hearing in which the administration would be put on trial before the board of aldermen as a court of inquiry.

"Provision thus having been made for taking evidence, the board of estimate and apportionment would be free to consider a plan of financing for the next year, which plan could fall in under the rule indicated by Senator Foley's proposed amendment—that is to say:

"On or before the tenth day of October such board shall prepare for public discussion a printed tentative budget. On or before the twentieth day of October such board shall prepare and file with its secretary, the budget proposed for adoption which may not thereafter be increased in any item or contain any new item but any item may be decreased or eliminated by action of such board between October twentieth and the date of its final adoption.

"Then November 1st could be the day for submitting the budget to the board of aldermen, as at present. The board of aldermen could then take up this appropriation bill together with the finance plan bills, for discussion and approval or disapproval. All the estimates would then have been disposed of after full opportunity had been given for all opposition to assert itself publicly in discussion of every item before November 1st. The board of aldermen as an independent, representative appropriating body could then devote its thought and energies to a critical consideration of the

*THE NEW YORK CITY BUDGET*

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finances of the present and succeeding years; it could thus focus its attention on the whole finance program as such, first having considered the questions of general policy involved in the budget statement or proposal that was laid before it as a means of opening the discussion, followed by the finance bills.<sup>71</sup>

<sup>71</sup> The substance of the amendment to the Foley bill was accepted by Senator Foley and introduced later in the session as an amendment to his original measure that became a law. The second Foley bill, however, was not reported by the committee.

CHAPTER IV  
CRITICISM BY THE PUBLIC

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The public, in proportion to its active interest in municipal finances, has been loud in its complaints of the New York city budget system. In the first place, the taxpayers' hearings are a farce. They accomplish nothing in respect to public control over government expenditure. The government throws the onus of this condition of affairs upon the public asserting that the taxpayers at large appear to take no interest in the making of the budget.

In answer, representatives of taxpayers' interests report that there is too little publicity attached to budget procedure. It is impossible to attend all the various hearings of the subcommittee, even though these are open to the public. Indeed, it is difficult for an outsider to form judgments even when he does attend.

The decisions of the subcommittee, moreover, are only recommendations. One member of the main committee may overturn the decision of the subcommittee; and the decisions of the main committee, the vital decisions, are behind closed doors. The publication of the tentative budget is made too late to enable one to study it carefully. It is generally published on the very day of the taxpayers' hearing. In 1916, in fact, it had to be brought out in three parts, and even then it presented without discrimination the subcommittee recommendations together with the final decisions of the main committee (where it had had time to act).<sup>1</sup>

And even if the budget were published earlier so that there would be time for careful perusal, very little would be gained. The budget itself is offered, not as an instrument for public control, but as an instrument for accounting control. The form is such as to be wholly unsuited for public control. The subsidiary

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<sup>1</sup> An amendment to the Foley Bill recommended in a resolution of the board of estimate and apportionment (March 2, 1917, Cal. No. 127) attempts to meet this objection by the following mandatory regulations:

(1) "That the board of estimate and apportionment shall prepare a printed tentative budget by the tenth day of October for public discussion.

(2) "That the board of estimate and apportionment shall prepare a second tentative budget by the twentieth day of October, which may not thereafter be increased in any item but may be decreased by action of the board of estimate and apportionment between October 20th and the date of its final adoption."

For full bill, see appendix E.

reports, the budget news bulletins published in an effort to meet the demand for greater publicity, are informing in themselves, but assist very little in facilitating public control of budgetary appropriations. Moreover, they are published separately and sporadically, while for practical purposes, they should be brought into juxtaposition with the proposed appropriations.

#### *Recommendations for Public Control*

The essence of democracy is that the people shall control the policies of government. The function of the machinery of the government is to carry out the policies. Policies relate to "services" rendered. For purposes of public control, it is evident that budget appropriations should be grouped according to kind of "service." A statement that so much money is to be spent for supplies, so much for materials, etc., gives no idea of what is to be done with those supplies or materials—what the public is to gain or lose by such expenditures. Nor again, does a functional classification subordinate to the object classification (the so-called "functionalization" to be found in the New York city budget) afford the information desired. The citizens must have the budget recast on the bases of the structural and functional classification to enable them to judge the cost of services rendered by their government so that they can voice their opinions regarding policies.

Evidence of the force of this contention, aside from the logic of it, may be found throughout the entire course of the budget-making process. The examiners, in order to ascertain the need for the employment of such and such additional stenographers or engineers, etc., must invariably ask what work is to be done, what service is to be rendered by these additional employes. The one question that is repeatedly asked in subcommittee hearings is "what do you need the money for?" or "what results will you get?"—that is, what service will be rendered, what work will be done. The one argument offered in defense of the request for an increased appropriation is almost invariably, "I need the money to get such and such results," or "to recompense employes for such and such services." The evidence bears out the logic of the case; control over appropriations must proceed along lines of function or product, not along lines of "objects of expenditure."

The question of detail is another matter. Detail of classification or subdivision depends upon the degree of detail of control desired. The general public is not interested at all in detailed

control, but investigators, employed by various institutions concerned with public affairs, are likely to be interested. It appears, therefore, that for ordinary purposes of publication, a budget setting forth the appropriations for general functions only would be sufficient—a budget carried to the extent of segregation of the 1917 budget under personal service, but not, as in this budget, with the functional subordinated to the object classification. Further, the general public confines its attention mainly to increases and decreases of appropriation only. Provision might be made to bring these changes into relief, by bold-faced type, for instance. But for the expert investigator, newspaper editor, etc., the details should be brought together in one place and made available for inspection.

Further details regarding cost data, we shall not attempt to consider here. The subject is a highly technical science in itself.

The first and most important recommendation in the interests of the public, therefore, is the establishment of an appropriation statement classified on the structural and functional bases of classification. This would necessarily involve the reorganization of the entire accounting system. Already, however, the thin edge of the wedge has been introduced. The examining bureaus are faced in the direction of cost data analysis. The examiners and engineers all agree that the cost data scheme of accounting is bound to come.

The immediate effort should be simply to hasten the movement for the introduction of cost accounting. The danger of trying to establish the new form of budget without a well-founded system of cost data, would be to build on sand. The scheme must collapse of its own weight. The experience of Richmond with the so-called cost data budget, should be a warning to all who would attempt this.

#### *Content of the Budget*

The budget should contain, in immediate juxtaposition to the appropriation estimates, comparisons with expenditures of other years—"operation accounts" and "consumption accounts,"—to enable the taxpayer to judge the amount of service he may hope to get for a given sum. Wherever possible, also, some tangible index of the amount of service might be given, perhaps in the nature of an explanatory text.

To afford an idea of the resources available, sundry additional financial statements are needed—a "balance sheet," in the first



place, a statement of what the city owns on one side, and of what the city owes or its liabilities, on the other; supporting statements regarding the current surplus or deficit, information regarding the public debt, and so on.

Some of these figures are published now in the comptroller's reports. To include them in the budget, would involve comparatively little additional labor or expense.

CHAPTER V  
CONCLUSIONS

APPENDICES

APPENDIX "A"

*Charter Section 226<sup>1</sup>*

APPROPRIATIONS AND THE BOARD OF ESTIMATE AND  
APPORTIONMENT

HOW CONSTITUTED; DUTIES; THE ANNUAL BUDGET

Sec. 226. The mayor, comptroller, president of the board of aldermen, and the presidents of the boroughs of Manhattan, Brooklyn, the Bronx, Queens and Richmond shall constitute the board of estimate and apportionment. Except as otherwise specifically provided, every act of the board of estimate and apportionment shall be by resolution adopted by a majority of the whole number of votes authorized by this section to be cast by said board. The mayor, comptroller and the president of the board of aldermen shall each be entitled to cast three votes; the presidents of the boroughs of Manhattan and Brooklyn shall each be entitled to cast two votes; and the presidents of the boroughs of the Bronx, Queens and Richmond shall each be entitled to cast one vote. A quorum of said board shall consist of a sufficient number of the members thereof to cast nine votes, of whom at least two of the members hereby authorized to cast three votes each shall be present. No resolution or amendment of any resolution shall be passed at the same meeting at which it is originally presented unless twelve votes shall be cast for its adoption. The first meeting of said board in every year shall be called by notice from the mayor, personally served upon the members of said board. Subsequent meetings shall be called as the said board shall direct, and at such meetings the mayor shall preside. The said board shall annually, between the first day of October and the first day of November meet, and make a budget of the amounts estimated to be required to pay the expenses of conducting the public business of The City of New York, as constituted by this act and of the counties of New York, Kings, Queens and Richmond for the then next ensuing year. Such budget shall be prepared in such detail as to the titles of appropriations, the terms and conditions, not inconsistent with law, under which the same may be expended, the aggregate sum and the items thereof allowed to each department, bureau, office, board or commission, as the said board of estimate and apportionment shall deem advisable. In order to enable said board to make such budget, the presidents of the several boroughs, the heads of departments, bureaus, offices, boards and commissions shall, not later than [September tenth], August first<sup>2</sup> send to the board of estimate and apportionment an estimate in writing, herein called a departmental estimate, of the amount of expenditure, specifying in detail the objects thereof, required in their respective departments, bureaus, offices, boards and commissions, including a statement of each of the salaries of their offices, clerks, employes and subordinates. Duplicates of these departmental estimates and statements shall be sent at the same time to the board of aldermen. Before finally determining upon the budget the board of estimate and apportionment shall fix such sufficient time or times

<sup>1</sup> As in effect at time the study was made. Amended, April 25, 1917, by Foley bill.

<sup>2</sup> As amended, 1917.

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as may be necessary to allow the taxpayers of said city to be heard in regard thereto, and the said board shall attend at the time or times so appointed for such hearing. After such budget is made by the board of estimate and apportionment, it shall be submitted by said board within five days to the board of aldermen, whereupon a special meeting of the board of aldermen shall be called by the mayor to consider such budget, and the same shall simultaneously be published in the City Record. The consideration of such budget by the board of aldermen shall continue from day to day until final action is taken thereon, but such consideration shall not continue beyond twenty days, and in the event of said board of aldermen taking no action thereon within such period of time, the said budget shall be deemed to be finally adopted as submitted by the board of estimate and apportionment. The board of aldermen may reduce the said several amounts fixed by the board of estimate and apportionment, except such amounts as are now or may hereafter be fixed by law, and except such amounts as may be inserted by the said board of estimate and apportionment for the payment of state taxes and payment of interest and principal of the city debt, but the board of aldermen may not increase such amounts nor vary the terms and conditions thereof, nor insert any new items. Such action of the board of aldermen on reducing any item or amount fixed by the board of estimate and apportionment shall be subject to the veto power of the mayor as elsewhere provided in this act, and unless such veto is over-ridden by a three-fourths vote of the board of aldermen, the item or amount as fixed by the board of estimate and apportionment shall stand as part of the budget. Prior to December twenty-fifth in each year the budget, as finally adopted pursuant to the provisions of this section, shall be certified by the mayor, comptroller and city clerk, whereupon the said several sums shall be and become appropriated to the several purposes therein named. On or before December thirty-first in each year the said budget shall be filed in the office of the comptroller and published in the City Record.

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APPENDIX "B"

RULES FOR THE GUIDANCE OF THE SUBCOMMITTEE

(Cal. No. 24)

May 17, 1916.

*Resolved*, That the board of estimate and apportionment hereby approves the following rules or principles for the information and guidance of the subcommittee of the committee on tax budget and the presidents of the several boroughs and heads of departments, bureaus, offices, boards and commissions in the City of New York and the counties therein, in the preparation of the departmental estimates and the tentative budget for the year 1917;

I. Total appropriations for personal service (except as regards regular periodical increases for large groups to which the city is committed) are to be kept within the total personal service appropriations, including revenue bonds for 1916.

II. Vacant positions are to be provided for only when there is affirmative proof of the need for them.

III. Positions deemed unnecessary by the subcommittee but necessary by the department heads are to be listed and the need for them determined by the tax budget committee.

*Increase in Compensation*

IV. Positions where the existing compensation is less than the minimum of the grade in which they are appraised under the proposed standard specifications, are to be provided for at the minimum of the proper grade, when requested by the department head, but no increases to the minimum will be recommended to the main committee except when the subcommittee believes such increases to be justified. Increases of this character when so requested by the department head are to take precedence over all other increases and to be made in order of the size of salaries beginning with the lowest.

V. Increases may be made within grade in accordance with the specifications where such increases are requested by the departments and justified by the facts as presented to the committee.

*Decreases in Compensation*

VI. The subcommittee on tax budget will recommend no decrease in compensation unless such decrease is requested by the head of a department and is justified in the opinion of the subcommittee.

*General*

VII. Differences of opinion regarding appraisals or the interpretation of these rules, between the subcommittee and the department head shall, on request of the department head, be formulated and submitted to the tax budget committee.

—and be it further

*Resolved*, That the secretary of this board be and is hereby directed to send copies of the foregoing resolution to the head of all departments, bureaus and offices of the city and county governments.

(Cal. No. 177)

*Resolved*, That the board of estimate and apportionment hereby amends its resolution adopted on April 28, 1916, requiring the submission of the departmental estimates for 1917 on or before June 1st, 1916, by substituting therefor the date July 1, 1916;

—and be it further

*Resolved*, That the secretary of the board is hereby directed to notify the head of every department, bureau, office, board and commission of this amendment.

October 3, 1916.

To the Heads of Departments:

At an executive meeting of the board of estimate and apportionment, held on September 27th, the question of regular periodic increases in salaries as

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recommended in the standard specifications was considered. The board agreed to grant a substantial number of increases among the lower paid employees in order to put the recommendations of the proposed standard specifications into partial effect in the 1917 budget.

As a basis for determining the final appropriation for this purpose the budget committee has decided to ask the heads of departments to prepare lists of employees who would be eligible for increases under restrictive conditions as indicated below. The budget committee wished to emphasize to the heads of departments that the conditions are to be regarded as minimum requirements and that they are not under any obligation to recommend all employees who would be eligible.

*Co-operation of Department Heads*

The plan for the coming budget must be regarded as somewhat experimental in character. Its success this year and its future development will depend in large measure on the intelligent co-operation of administrative officers in preparing and reviewing the departmental service ratings.

*Preparation of Departmental Eligible List*

The lists should be prepared by codes following the order of the original budget requests. Opposite each name on the list it should be indicated whether or not the person has already been recommended for increase in the departmental estimate. It is suggested that the capital letters "R" and "N.R." be used for this purpose to indicate whether the persons have been "already recommended" or "not recommended."

It is also requested that a supplemental list be submitted carrying the names of employees who have been recommended for increases in the estimate, but would not be eligible under the proposed conditions.

*Minimum Conditions Regarding Increases for Employees in the Lower Grade*

*Clerical Service*

Employees in the following grades:

Clerk group, Grade 1 (\$300 to \$540)

Grade 2a (\$600 to \$720)

Stenographer group, Grade 1 (\$720 to \$900)

Telephone operator group, Grade 1 (\$600 to \$900)

Typist, group, Grade 1 (\$600 to \$780)

—who have served one year or more at their present salary rates and have received a departmental rating of "average" in efficiency and punctuality for the four quarters of the year ending June 30, 1916.

*Custodial Service*

Employees in the following grades:

Animal keeper group, Grade 1 (\$900 to \$1,080)

Bridge tender group, Grade 1 (\$860 to \$960)

Caretaker group, Grade 1 (\$780 to \$960)

Elevator operator group, Grade 1 (\$780 to \$960)

Watchman group, Grade 1 (\$720 to \$840)

Ticket chopper group, Grade 1 (\$744 to \$864)

—who have served one year or more at their present salary rates and have received a departmental rating of "average" in efficiency and punctuality for the four quarters of the year ending June 30, 1916.

Employees in the custodial service, other than those mentioned above, whose salary is less than \$1,200, who have served two years or more at their present salary rates and have received a departmental rating of "above average" in efficiency and punctuality for at least two quarters of the year ending June 30, 1916; or who have served one year or more at their present salary rates and have received a departmental rating of "far above average" in efficiency and punctuality for at least two quarters of the year ending June 30, 1916.

*Professional, Sub-professional, Investigational and Educational Services*

Employees on full time whose salary is less than \$1,200, who have served three years or more at their present salary rate and have received a departmental rating of "average" in efficiency and punctuality for the four quarters of the

APPENDIX B—THE RULES

year ending June 30, 1916, or who have served two years or more at their present salary rates and have received a departmental rating of "above average" in efficiency and punctuality for at least two quarters of the year ending June 30, 1916, or who have served one year or more at their present salary rates and have received a departmental rating of "far above average" in efficiency and punctuality for at least two quarters of the year ending June 30, 1916.

In the case of employes in the non-competitive or exempt class, such as nurses in hospitals, for whom no departmental service records are prepared a special certificate of excellent service must be submitted by the department head to justify an increase for employes who have served less than three years at their present salary rates.

Inspectional Service

First grade inspectors whose salary is less than \$1,500, who have served for three years or more at their present salary rates and have received a departmental rating of "average" in efficiency and punctuality for the four quarters of the year ending June 30, 1916, or who have served for two years or more at their present salary rates and have received a departmental rating of "above average" in efficiency and punctuality for at least two quarters of the year ending June 30, 1916, or who have served at least one year at their present salary rates and have received a departmental rating of "far above average" in efficiency and punctuality for at least two quarters of the year ending June 30, 1916.

Institutional Service

Employes in this service whose salary is less than \$660 with maintenance or \$900 without maintenance and who have served at least one year or six months, according to the provisions of the standard specifications, and whose records are considered satisfactory by the head of the department.

Street Cleaning and Unskilled Service

Employes in this service in the labor class (i.e., employes below the competitive class in the civil service classification) who have served at least one year at their present salary rates and whose services are considered satisfactory by the head of the department.

Employes in these services, in the competitive class, whose salaries are less than \$1,200, who have served three years or more at their present salary rates and have received a departmental rating of "average" in efficiency and punctuality for the four quarters ending June 30, 1916, or who have served two years or more at their present salary rates and have received a departmental rating of "above average" in efficiency and punctuality for at least two quarters of the year ending June 30, 1916, or who have served one year at their present salary rates and have received a departmental rating of "far above average" in efficiency and punctuality for at least two quarters of the year ending June 30, 1916.

The increase of \$12 in the salaries of assistant foremen in the street cleaning department in the 1916 budget, which was made in order to raise these employes to the minimum of the standard grade shall not be considered as an increase in making advancements in the 1917 budget.

NOTE.—The above rules shall not be construed so as to permit of an increase to a rate higher than the maximum appraised value of the work to be done, or so as to prevent an increase to the minimum of the grade in which the position is appraised.

APPENDIX "C"

TERMS AND CONDITIONS—BUDGET 1917

(Regarding changes in appropriations, etc.)

Resolved, That this, the Budget of the City of New York, as hereby made in pursuance of section 226 of the Greater New York Charter, shall be administered under the following terms and conditions:

First—

- (a) That no transfers shall be made from appropriations or schedules of "Salaries Regular Employees" to any appropriation or schedule other than "Salaries Regular Employees"
- (b) That no transfers shall be made from appropriations or schedules of "Salaries Temporary Employees" to any appropriation or schedule other than "Salaries Temporary Employees"
- (c) That no transfers shall be made from appropriations or schedules of "Wages Regular Employees" to any appropriation or schedule other than "Wages Regular Employees"
- (d) That no transfers shall be made from appropriations or schedules of "Wages Temporary Employees" to any appropriation or schedule other than "Wages Temporary Employees"

Provided, however, that in the case of the appropriation schedules of the uniformed force of the Department of Street Cleaning the prohibitions contained in (a), (b), (c) and (d) may be waived when authorized by twelve votes of the Board of Estimate and Apportionment.

- (e) That no transfers shall be made from or to appropriations classified as "Hire of Horses and Vehicles with Drivers," "Hire of Horses and Vehicles without Drivers" or "Hire of Automobiles," except to or from an appropriation classified as "Hire of Horses and Vehicles with Drivers," "Hire of Horses and Vehicles without Drivers" or "Hire of Automobiles," except where the work to be done and paid for from the account to which the transfer is made is a substitute for work or service intended to have been done and paid for from the account from which the transfer is made
- (f) That no transfers shall be made from appropriations or schedules of "Fees and Commissions" to any appropriation or schedule other than "Fees and Commissions"
- (g) That no transfers shall be made from any of the appropriations made herein under any classification other than "Personal Service" to any appropriation classified as "Personal Service," except in cases where the title of appropriation specifically provides for transfers herein forbidden, or in cases where appropriations were made under the classification of "General Repairs," if, upon the written statement of the Department head, the Board of Estimate and Apportionment finds that the repair work can be done more economically by departmental labor
- (h) That no transfers shall be made from any of the appropriations made herein under any classification where the appropriation is made under conditions which prohibit such transfer or when the appropriation is made for the purchase of some stated article or articles or for the payment of taxes, although otherwise the transfer might be proper under the budget resolutions in the budget for 1917.

Second—That no change shall be made by any board or head of an office, bureau or department in the city or county governments in the schedules of "Salaries Regular Employees"; "Salaries Temporary Employees"; "Wages Regular Employees"; "Wages Temporary Employees"; "Fees and Commissions," herein contained, except when authorized thereto by twelve (12) votes of the Board of Estimate and Apportionment, and that no requests for changes shall be considered except as follows:

- (a) In the case of schedules or appropriations of "Salaries Regular Employees," where the proposed change will not increase the amounts

APPENDIX C—THE TERMS AND CONDITIONS

expendable in any month to more than one-twelfth of the total amount herein appropriated for "Salaries Regular Employees"

- (b) In the case of schedules or appropriations of "Wages Regular Employees," where the proposed change will not increase the amounts expendable in any week to more than the pro rata of the number of working days in such week to the total number of working days provided for such schedule line for the whole year
- (c) That vacancies existing on January 1, 1917, or occurring thereafter in schedules supporting appropriations in this budget for "Salaries Regular Employees," or for "Salaries Temporary Employees," excepting uniformed forces of the Departments of Police, Fire, and Street Cleaning, positions in the labor class and, where emergency conditions exist in either of the following cases, i.e.:

Custodial forces in penal and correctional institutions

Nurses in hospitals

Institutional helpers, and

Positions involving the actual operation of machinery or mechanical plants,

shall be filled only after certificate by the Committee on Salaries and Grades of the Board of Estimate and Apportionment:

- (1) That the position is required;
- (2) That the title and compensation for such vacant position conform to the standard titles, work specifications and compensation grades fixed by the Board of Estimate and Apportionment where there has been such fixation; or
- (3) In the event of there having been no such fixation by the Board of Estimate and Apportionment, that the title and compensation for such vacant position are apparently proper.

Provided that in the cases where an appointment is made pursuant to the exceptions hereinbefore set forth permitting an appointment where emergency conditions exist, in the custodial forces in penal and correctional institutions, nurses in hospitals, institutional helpers, and positions involving the actual operation of machinery or mechanical plants, it shall only be made where it shall be impracticable to obtain a certificate as herein provided with such expedition as not to interfere with the public interest.

- (d) That appointments to vacant positions, for which standard titles and compensations have been fixed by this board, shall be made at the lowest rate within the standard grade for such position unless this requirement is specifically waived by resolution of the board

The procedure under this section is subject to revision by a majority vote of the Board of Estimate and Apportionment.

- (e) That no modification of any schedule supporting an appropriation for "Salaries Regular Employees" or "Salaries Temporary Employees" in the budget of the City of New York for the year 1917 which affects the compensation of any position included in the budget as passed by the Board of Estimate and Apportionment, shall be made except when authorized by resolution of the Board of Estimate and Apportionment in conformity with standard titles, work specifications and compensation grades which may be or have been approved by said board.

The procedure under this section is subject to revision by a majority vote of the Board of Estimate and Apportionment.

- (f) There shall be credited to the "Funds for Salary and Wage Accruals from Schedule-supported Appropriations to be Expended as Provided in the Budget Resolutions Herewith" established in this budget for the City of New York and for each of the five counties therein, as soon as practicable after the expiration of each salary or wage period, the accruals during such period of "Salaries Regular Employees" and "Wages Regular Employees," but these credits shall be made only upon the submission of reports thereon by the Comptroller to the Board of Estimate and Apportionment pursuant to section 237 of the Greater New York charter.



Transfers from the credits so set up shall be made only to the divisions of government (the city and the respective counties) from which the credits were originally transferred, and only by the unanimous vote of all the members of the Board of Estimate and Apportionment. Subject to these conditions, such transfers may be made for any tax-budget purpose.

Fourth—

- (a) That the heads of the several boards, offices, bureaus and departments of the city and county governments shall prepare their several payrolls for audit by the Department of Finance in accordance with the items of the aforesaid schedules, entitled "Salaries Regular Employees"; "Salaries Temporary Employees"; "Wages Regular Employees"; "Wages Temporary Employees"; "Fees and Commissions," or in case these items have been changed by twelve (12) votes of the Board of Estimate and Apportionment, in accordance with the items of the schedules as changed, and that no payroll shall be passed by the Department of Finance unless the incumbents and the rate of individual compensation shall not exceed but may be less than such schedule lines as originally adopted or as hereafter modified by the Board of Estimate and Apportionment, provided the lesser salary or wage grade has been approved pursuant to section 56 of the Charter. Upon the issuance of the certificate authorizing the filling of vacant positions, as provided in the second section, subdivision (c) of this resolution, the Committee on Salaries and Grades of the Board of Estimate and Apportionment shall submit to the said board a modification of the salary schedule to conform to the payroll condition as modified by the filling of such vacancies.
- (b) That each payroll of any department, in addition to any other departmental number, shall be numbered during the year serially, beginning with number one for each specific account, and such payroll shall bear a certificate signed by a person cognizant of the fact, stating that the recapitulation attached thereto is the correct recapitulation for the payroll bearing said number.
- (c) That on all payrolls against schedules entitled "Salaries Regular Employees" and "Wages Regular Employees" there shall be set forth the monthly or weekly pro rata expenditures against such schedules, or in case the items on such schedules have been changed by twelve (12) votes of the Board of Estimate and Apportionment the monthly or weekly pro rata expenditures against such schedules as changed.
- (d) That there shall be affixed to all payrolls a certificate made by the person preparing such payroll to the effect that there is a time record on file in said board, office, bureau or department, certified by the person or persons having knowledge of the facts, showing the character of service and the exact time of employment of such persons or persons, except heads of departments, and excepting bureau and division heads relieved by the head of their department from the duty of keeping such record on said payrolls, and that the distribution or division of the time of such person or persons as shown on such payrolls is in accordance with such time record.
- (e) Before advertising for proposals for work to be performed under contract and chargeable to the 1917 budget, where the cost thereof is estimated to be one thousand dollars (\$1,000) or more, the proposed contract and specifications shall be submitted for approval to the Board of Estimate and Apportionment.

*Omitted in the 1917 Budget on Account of Elimination of Scheduling in Classes Indicated*

Be it further

*Resolved*, That wherever an appropriation under the classification of "Supplies," "Purchase of Equipment," "Materials," "Contract or Open Order Service," "Contingencies" or "Fixed Charges and Contributions" is supported by a schedule, all expenditures against such appropriation shall be made in accordance with such schedule and no voucher shall be passed by the Department of Finance for a sum exceeding the amount shown in said schedule, except when such schedule shall have been changed by twelve (12) votes of the Board of Estimate and Apportionment.

**THE NEW YORK CITY BUDGET**

placed directly under the supervision of the Budget Committee, as representing the Board. We are of the opinion it is desirable that the work be under the immediate supervision of the Budget Committee instead of under the Board as a whole, because the results of the work of this division will naturally be reflected in the appropriations recommended by the Budget Committee.

Of the \$56,600 provided in the 1913 budget for the purpose of this division \$400 is for Office Supplies, and \$1,000 for Office Equipment, \$100 for Telephone Service, \$2,000 for contingencies, and the balance of \$53,100 for salary purposes. The salary schedules established in the Budget are as follows:

<b>2120 Salaries, Regular Employees, Efficiency and Budget Advisory Force:</b>	
Efficiency Engineer, 2 at \$6,000 .....	\$12,000.00
Efficiency Engineer .....	5,000.00
Efficiency Engineer .....	4,000.00
Efficiency Accountant .....	3,000.00
Associate Efficiency Engineer, 2 at \$2,700 .....	5,400.00
Associate Efficiency Examiner, 2 at \$1,800 .....	3,600.00
Associate Efficiency Examiner, 2 at \$1,500 .....	3,000.00
Clerk .....	1,200.00
Clerk .....	900.00
Stenographer and Typewriter, 2 at \$1,500 .....	3,000.00
	\$41,100.00

<b>2123 Salaries, Temporary Employees:</b>	
Associate Efficiency Engineer, at \$225 per month (12 months) .....	\$2,700.00
Associate Efficiency Engineer, at \$125 per month (24 months) .....	3,000.00
Computer at \$125 per month (24 months) .....	3,000.00
Draftsman at \$125 per month (12 months) .....	1,500.00
Typewriting Copyist at \$75 per month (24 months) ..	1,800.00
	\$12,000.00

We recommend that the Budget Committee be authorized to request such transfers of employes from other positions, and to make such additional appointments, as may be necessary to organize the Efficiency Division in compliance with the above schedules.

It is proposed as far as possible to obtain men of practical experience in the work contemplated for the division. Should the Budget Committee be authorized to make appointments it will endeavor to report to this Board at or before its first meeting in April the organization of a competent staff.

Your committee recommends the adoption of the attached resolution giving the approval of this Board to the recommendations contained in this report.

Respectfully,

WM. A. PRENDERGAST, Comptroller; JOHN PURROY MITCHEL, President, Board of Aldermen; GEORGE MCANENY, President, Borough of Manhattan, Budget Committee.

## APPENDIX "E"

## PROPOSED AMENDMENT TO CHARTER, SECTION 226

("The Foley Bill")

A bill to amend Section 226 of the charter was introduced in the Senate by Senator James A. Foley, on February 6, 1916. (Introduction No. 362, Print No. 367.) The amendment consisted of the insertion between the sentence ending "to the board of aldermen," and the sentence beginning "before finally determining" (See Appendix "A", page 143, line 38) of the following:

"The budget as proposed for adoption shall be filed with the secretary of the board of estimate and apportionment at least ten days before its final adoption, and a copy thereof delivered to each member of said board at the same time. No changes shall be made in such budget as proposed, either in the appropriations contained therein, or in the terms and conditions thereof, during the said ten days, except that said board of estimate and apportionment may, on the day of its final adoption, make reductions in amounts appropriated, or eliminate appropriations contained therein, or change the terms and conditions thereof." 5 10

On February 27th, the above was amended by changing "ten days" (lines 2 and 6 above) to "5 days."

Meanwhile, the bill was brought to the attention of the board of estimate and apportionment (New York City) to be approved or disapproved by them. At the suggestion of the mayor, a different amendment was proposed by resolution of the board of estimate and apportionment (March 2d), which was subsequently (March 19th) introduced in the Senate by Senator Foley. This amendment changed *September 10th* (See Appendix "A", line 31) to August 1st,<sup>1</sup> and substituted for the original amendment proposed in the Foley bill (in substance):

"That the Board of Estimate and Apportionment shall prepare a printed tentative budget by the tenth day of October for public discussion.

"That the Board of Estimate and Apportionment shall prepare a second tentative budget by the twentieth day of October, which may not thereafter be increased in any item but may be decreased by action of the Board of Estimate and Apportionment, between October 20th and the date of its final adoption."

The amendment urged by Dr. Cleveland of the Bureau of Municipal Research, would effect changes and additions to the charter section (226) from line 20 (See Appendix "A"), to line 63:

"The said board shall annually between the first day of October and the first day of November meet, and make a budget of the amounts estimated to be required to pay the cost (expenses) of conducting the public business of the City of New York, as constituted by this act and of the counties of New York, Kings, Bronx, Queens and Richmond for the then next ensuing year; also an estimate of the financial resources which will be available for meeting the cost of conducting public business for the next ensuing year as described above; and in this separately to set forth what amount it is estimated will be available from revenue sources and what amount will be made available through borrowing. At the same time it shall be the duty of the board of estimate and apportionment to submit to the board of aldermen drafts of finance bills to consist of a proposed appropriation ordinance, a proposed bond authorization, and a proposed revenue ordinance. Such appropriation ordinance (budget) shall be prepared in such detail as to the titles of appropriations, the terms and conditions, not inconsistent with law, under which the same may be expended, the aggregate sum and the items thereof allowed to each department, bureau, office, board or commission, as the said board of estimate and apportionment shall deem advisable. In order to enable said board to make such budget each

<sup>1</sup> This was enacted into law, Chapter 258, Laws 1917.

## THE NEW YORK CITY BUDGET

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member thereof (the presidents of the several boroughs) for the heads of departments, bureaus, offices, boards and (commissioners) commissions under his jurisdiction shall, not later than September tenth send to the board of estimate and apportionment an estimate in writing, herein called a departmental estimate, of the amount of expenditure, specifying in detail the objects thereof, required in their respective departments, bureaus, offices, boards and commissions, including a statement of each of the salaries of their officers, clerks, employes and subordinates. Duplicates of these departmental estimates and statements shall be sent at the same time to the board of aldermen; and in case the departmental estimates are not submitted on or before said date, the amounts actually appropriated for the current year shall be regarded as the estimates for the ensuing year. The board of aldermen shall thereupon proceed to consider the departmental estimates and statements in committee-of-the-whole at which time and for which purpose it shall be the duty of the elected executive officer whose estimates are being considered, or of such persons as may be designated by him, to be present to answer questions, explain and discuss the same;—at which time and for which purpose the estimates of only one department, bureau, office, board or commission shall be taken up at a time; and after discussion of each such department's estimates shall be completed the total amount of the estimates for such department, bureau, office, board or commission shall be brought to a vote of the members of the board of aldermen sitting in committee-of-the-whole, which vote shall be made a matter of public record. On or before the tenth day of October, the board of estimate and apportionment shall prepare for public discussion a printed tentative budget. On or before the twentieth day of October each board shall prepare and file with its secretary, the budget proposed for adoption which may not thereafter be increased in any item or contain any new item but any item may be decreased or eliminated by action of such board between October twentieth and the date of its final adoption. Before finally determining upon the budget the board of estimate and apportionment shall fix such sufficient time or times as may be necessary to allow the taxpayers of said city to be heard in regard thereto, and the said board shall attend at the same time or times so appointed for such hearing. After such budget is made by the board of estimate and apportionment, it shall be submitted by said board within five days to the board of aldermen, whereupon a special meeting of the board of aldermen shall be called by the mayor to consider such budget, and the same shall simultaneously be published in the City Record. The consideration of such budget by the board of aldermen shall continue from day to day with the elected executive or their representatives present, until final action is taken thereon, but such consideration shall not continue beyond twenty days, and in the event of said board of aldermen taking no action thereon within such period of time, the said budget shall be deemed to be finally adopted as submitted by the board of estimate and apportionment."

# MUNICIPAL RESEARCH

To promote the application of scientific principles to government

Issued Monthly by the

No. 77 BUREAU OF MUNICIPAL RESEARCH AND TRAINING SCHOOL FOR PUBLIC SERVICE 261 Broadway, New York Sept. 1916

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## CITIZEN AGENCIES FOR RESEARCH IN GOVERNMENT

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| <p>No.<br/>57. JANUARY—Next Steps in the Development of a Budget for the City of New York. (142 pp.) 50 cents.</p> <p>58. FEBRUARY—A "State Budget"—Proposals for the Constitutional Convention of New York. (53 pp.) 25 cents.</p> <p>59. MARCH—Financial Problems of the City of New York; the "Pay-As-You-Go" Plan, Etc. (70 pp.) 75 cents.</p> <p>60. APRIL—Condition of the New York State Sinking Funds—A Report to the Constitutional Convention. (39 pp.) 50 cents.</p> <p>61. MAY—Constitution and Government of the State of New York—An Appraisal. (250 pp.) \$1.00.</p> <p>62. JUNE—Budget Systems; A Discussion Before the New York Constitutional Convention. (200 pp.) Including the Report of the Finance Committee. \$1.00.</p> <p>63. JULY—State Administration—Discussions of Proposed Amendments for the Reorganization of the Executive Branch Before the New York Constitutional Convention—Including Report of the Committee and Speech of Elihu Root. (190 pp.) \$1.00.</p> <p>64. AUGUST—State Finances—A Report on the Financial Procedure of the State of New York, with Special Reference to the Direct Tax. (19 pp.) 25 cents.</p> <p>65. SEPTEMBER—Administration of the Indian Office; Public Opinion and National Economy. (132 pp.) \$1.00.</p> | <p>No.<br/>66. OCTOBER—The Rights of Civil Servants. (202 pp.) \$1.00.</p> <p>67. NOVEMBER—Part I: The Standardization of Public Employments—An Interpretation. (121 pp.) \$1.00.</p> <p>68. DECEMBER—Training for Municipal Service. (51 pp.) 50 cents.</p>   |
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## INTRODUCTION

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The following pages are a contribution to a history of citizen bureaus of municipal and governmental research. The preparation of the material for this number was begun in the spring of 1916, when a letter was sent to the director of each of the following citizen agencies for research in government throughout the United States and Canada, requesting a chapter reviewing the history and achievements of his organization:

- The Finance Commission of the City of Boston, established 1907
- The Bureau of Municipal Research of Philadelphia, 1909
- The Bureau of Municipal Research of Cincinnati, 1909
- The Bureau of Public Efficiency, Chicago, 1910
- The Westchester County (N. Y.) Research Bureau, 1910
- The Public Welfare Committee of Essex County, N. J., 1911
- The Dayton Bureau of Research, 1912
- The Bureau of State and Municipal Research of Baltimore, 1912
- The Citizens' Bureau of Municipal Efficiency, Milwaukee, 1913
- The Bureau of Municipal Research of the Minneapolis Civic & Commerce Association, 1913
- The Ohio Institute for Public Efficiency, 1913
- The Springfield (Mass.) Bureau of Municipal Research, 1914
- The Bureau of Municipal Research of Toronto, Canada, 1914
- The Akron Bureau of Municipal Research, 1914
- The Rochester (N. Y.) Bureau of Municipal Research, 1915
- The Bureau of State Research of the New Jersey State Chamber of Commerce, 1915
- The Detroit Bureau of Governmental Research, 1916
- The Yonkers Bureau of Municipal Research, 1916



The directors of nine organizations, whose work is described and reviewed in this volume, replied, giving the information requested. The others stated that they were unable, owing to pressure of work, to prepare the material in time for this issue. Three bureaus organized in 1916, of course, could have reported only on their beginnings, although the Detroit Bureau has already conducted a survey of the public works activities of the city government, and the Yonkers Bureau has made a distinct impression by gathering facts relating to the government of that city. The San Francisco Bureau has just been established, following a survey of the government of the city and county by the New York Bureau, and will not be fully organized for independent work until 1917.

In addition to these state and municipal bureaus, a national organization known as The Institute for Government Research has been incorporated in Washington, D. C., and is now organizing a staff for work in the federal government.

A brief historical statement with respect to the organization of the Bureau of Municipal Research of New York was presented as a part of a general description of its present work in MUNICIPAL RESEARCH, No. 71, for March, 1916.

No one who takes the trouble to read this interesting document can fail to discover its significance. It constitutes an important chapter in the struggle for wisely ordered and efficient government in the United States. It covers the transition period in the development of municipal government from the epoch of negligent citizenship and uninformed administration, described in the first edition of Bryce's "American Commonwealth," toward an ideal order in which all of the scientific and intellectual resources of our civilization will be at the disposal of public service.

But it is not primarily as a piece of history that this volume is issued, although it is important that there should be preserved for the future some record of the movement for economy and efficiency in government. Nor is it contended that this volume presents an exhaustive account of current municipal research.

## INTRODUCTION

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We are not permitted to overlook the immense amount of research, investigation and comparative studies which have been carried on at universities, reference libraries, offices of private business concerns and institutions, and in the rooms of special legislative and executive commissions. Whoever would tell the complete story has before him a far greater task than is contemplated in this and a subsequent issue of MUNICIPAL RESEARCH which will carry the stories of other research bureaus.

The prime purpose of this review, even within the limits set above, is not historical but comparative. It is designed rather to be an opportunity for the head of each bureau to tell the story of his own work and to give to others the benefit of his interpretation of future opportunity. This is a record which will have for workers in this field and the public quite as much significance as an account and appraisal of results by outside chroniclers. From these accounts, the workers in bureaus and institutes of government research in various parts of the country may gain much inspiration through the stories of actual experiences and difficulties surmounted, as well as information about the policies of other institutions.

Quite naturally, at the outset of a cursory review of these reports we are led to inquire into the circumstances under which each bureau originated. The answer is clear. Bureaus of Municipal Research have sprung up in connection with older civic organizations or have been undertaken as new citizen enterprises. At Milwaukee, it was the City Club that arranged the first meeting at which the research idea was expounded. It is true that the City Club did not assume responsibility for the new bureau, but to the civic interest of that association may be traced the initial steps in the new movement in Milwaukee. In Minneapolis, it was the Civic and Commerce Association that took the lead in municipal research. The Association financed the work from its own budget and the bureau has been from the beginning simply a division of the general organization. The success of this experiment is one more bit of evidence to show that the interest of commercial societies is no longer confined to mere

"boosting," but has widened to take into account that great agency of public welfare, the government itself. In Chicago, the trustees of the Bureau are appointed by the directors of the City Club, and close relations are maintained between the two organizations. In Akron, Ohio, "the bureau of municipal research, although an independent body, both in its organization and work, is affiliated with the chamber of commerce and was organized through the effort of a former president of the chamber and one of the committees. It has frequently been the means of providing chamber committees with data for their work." In New Jersey, the bureau was started by the state Chamber of Commerce and its work has been carried on with the support and direction of that organization.

As for the work of the several bureaus, the following chapters speak for themselves, but there are certain important conclusions to be drawn from a review of all of them. The first of these is that the most telling results have been secured by co-operation with public officers in a quiet and unobtrusive manner. Apparently there has been very little resort to spectacular methods. Each of the bureaus has sought to convince the officers, who are responsible to the public for their decisions, by the weight of solid arguments and incontrovertible facts. To take a single example, the bureau of municipal research in Minneapolis sets forth as its first purpose, the desire "through co-operation with public officers, to secure the adoption of scientific methods of accounting and administration and to collect, classify, correlate and interpret data with reference to the conduct of public affairs." The bureau of Akron "believes in and has consistently attempted to give co-operation to officials in the study of all city problems." The Minneapolis bureau announces that it has "followed the policy of serving the city departments and of letting the publicity concerning its work emanate from the departments benefited by its efforts."

It is a matter for congratulation that directors of bureaus are able to report cordial relations with city officials and widespread appreciation of bureau work in official circles. For instance, the

director of the Akron bureau reports that "in practically all cases, officials have recognized the possibilities of help and progress in the use of such methods, with the result that there has been little or no friction and much of pleasant co-operation. The bureau expects to continue the same methods in the year to come and hopes for even greater results than the year just closed has shown."

The striking fact about this co-operation with public officers has been the willingness of bureau trustees and directors to forego seeking credit for achievements and to subordinate their institutions to the exigencies of the great work in hand. The Dayton Bureau declares that it has not been its custom "to make public reports of its work as it felt that the credit for the constructive work done in city government rightfully belonged to the public officials who put it into effect." Under these circumstances, the continued support of the bureaus is conclusive proof that this country is not wanting in public-spirited citizens who are willing to sustain an expensive civic work that produces results for the community but little or no advertisement for its promoters.

In turning to the concrete programs of the several institutions, we find that every one has laid great emphasis upon finances, accounting, reporting, and budget making. If reason had not pointed the way, experience would have shown that efficiency in administration cannot be carried very far unless a system of cost accounting and scientific budget making is installed. This would seem to show that during the next few years, at least, municipal efficiency cannot go very far without experts in accounting and finance. Even in the field of public works administration, the installation of cost accounting is essential to efficiency in engineering projects.

Important as the accounting program of each bureau appears to be, it would be a mistake to imagine that a sound financial system is an end rather than a means or that it exhausts the possibilities of constructive work. On the contrary, it is but the beginning of bureau enterprise because its purpose is to lay the foundation for making facts available about the management of

public business. Wise policy forbids launching out on larger schemes of public improvement before fiscal and accounting foundations are securely laid or at least before adequate provision is made for underwriting and controlling the costs of new functions of government. Nevertheless a survey of the reports here presented shows that the whole range of public administration is regarded as the proper field for bureau enterprise. Education, recreation, public works, fire, police, health, and hospital administration, and social service in a broad sense are included in bureau programs of constructive reforms.

This fact alone is a standing refutation of the theory, sometimes entertained, that bureaus of municipal research are mere cheese-paring institutions. The bureaus reporting their work here have never lost sight of the human purposes to be served by government and have never recommended immediate economy at the cost of larger human efficiency. The spirit of the whole movement is voiced in the Philadelphia charter which declares the purpose of the institution to be—in addition to the advancement of efficiency in administration—"the development of a constructive program for the city that shall be based upon adequate knowledge and consideration of community needs."

To attempt such a large program and at the same time not be drawn into mere partisan channels is a remarkable achievement, but it would seem that the bureaus have, in the main, accomplished that difficult feat. As the Akron bureau reports, its work continues whether the administration be Republican, Democrat, Socialist, or Fusion. Dealing with facts and genuine information about government, bureaus have no enemies except those who do not wish daylight on the business of government. The fact that the Socialists as well as members of other parties, in Milwaukee, give such a cordial reception to the idea of municipal research is proof of the catholicity of the movement. Bureaus exist to serve the government and the citizens by the study, collection, and analysis of the data of government. They develop a type of public servant who is, by training and interest, removed from the ordinary schemes of partisan politics. At least such

is the ideal set before bureau workers, although they may not always realize it to the full.

Perhaps not the least striking among the newer phases of the bureau movement is the extension of the research idea into state government in Ohio and New Jersey. The Ohio Institute is unique in that it combines services to state administrative agencies as well as to municipalities. Obviously, smaller cities and towns cannot afford to maintain their own bureau staffs and yet their needs, relatively speaking, are as imperative as those of the great cities. In the Ohio Institute idea there is a promise of a new development in governmental research. The New Jersey bureau has done such remarkable work in the line of state constabulary studies, full crew law investigations and similar matters, that it is pointing the way to new enterprise in every state in the Union. Why should not every commonwealth have a staff of expert advisers prepared to serve the central government, and cities, counties, villages, and towns, as well?

It would appear from the records before us that the subject of publicity has not been neglected. The Philadelphia bureau reports that it has published regularly its weekly bulletin known as *Citizens' Business*, in addition to special reports and articles, and has acted as a bureau of information to residents in the city and outside. The Akron bureau likewise issues a weekly bulletin called *Public Information*. The Chicago bureau seems to have restricted its publicity to more extensive reports on specific problems of local government. Perhaps the most unique campaign of publicity has been that conducted by the Dayton bureau. In accordance with the custom of several organizations it has issued leaflets and reports of special studies, but in the summer of 1916 it made a startling departure by issuing full page advertisements in the Dayton papers, telling stories of "the efficient work and plans of the city's public servants." The Ohio Institute emphasized the need of developing "constructive publicity in social service." The Minneapolis survey of school administration is declared by the *Educational Review* to be a "model of its kind." It is to be regretted that all of the publications of

the several bureaus, by no means omitting the most fugitive leaflets, are not collected at one place where they may be examined by those interested in the important matter of civic publicity.

Especially significant are the side lights thrown by these reports on training for public service. It is encouraging to note how much of the leadership in the bureau movement has been assumed by students in the New York Training School for Public Service. When the history of the struggle for efficiency in democracy is written, the achievements of Training School men will call for special chapters. It is also gratifying to learn that bureaus, which do not have funds for distinct work in training for the public service, have been able to give insight, discipline, and experience to a large number of students of government and to find places for them in official and unofficial public service. Philadelphia, for example, reports that eight staff members have been called directly into the service of the city and that only half of them were appointed by the "reformers." The report of the Dayton bureau adds a contribution to the solution of that important question: "Is there a career in the public service for those who have the proper training?"

Finally, a word should be said about the spirit of the bureau work. There appears nowhere in these records a sign of "superior airs." The bureaus have found in many cases that department heads and subordinates were fully aware of defects in their organizations and were capable of remedying them if the pressure of routine work permitted. The Akron bureau flatly declares that it does not "pose as an organization of experts." The attitude of bureau directors and staffs is not that of the man who "knows it all" and will tell city officers "how to do their work." The true spirit of the bureau movement is that of patient, scientific inquiry and genuine helpfulness. The science of human management is the most difficult of all sciences, and bureaus have developed no ready-made processes to be imposed on public service. Machine government is possible, perhaps, in an army, but nowhere else.

## CHAPTER I

### THE ORGANIZATION AND WORK OF THE FINANCE COMMISSION OF THE CITY OF BOSTON<sup>1</sup>

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#### *The Citizens' Call for an Inquiry into City Administration*

During the year 1906, public opinion was arrayed against the administration of the city. The financial condition of the city was not such as to inspire confidence, and the methods employed in the carrying on of the city's business were of such a nature as to demand radical reform. This public opposition reached a head when the Good Government Association demanded that the finances of the city be investigated, and that a comprehensive program of administrative reform be laid down. To this end the legislature was petitioned to appoint a commission which should conduct such an investigation and make such recommendations.

The mayor of the city felt that the investigation had better be in charge of a commission appointed by the city executive rather than by the governor. The Good Government Association agreed that it was better to have the city carry on its own investigation, and it consequently consented to the plan proposed by the mayor. With the support of the Association the mayor petitioned the city council to allow the appointment of a commission. His message to the council was transmitted while legislation as to a state commission was still pending. The bill providing for the formation of a commission appointed by the state was not withdrawn until the city council approved the mayor's request, and the Finance Commission was an accepted fact.

It is in the light of these facts that the following account must be considered. The first demand for the appointment of an investigating body came from the public; acquiescence on the part of the city's administrative officers was necessary.

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<sup>1</sup> Prepared for MUNICIPAL RESEARCH by Hon. John R. Murphy, Chairman of the Finance Commission.



*The Establishment of the Finance Commission Nominated by  
Citizen Organizations*

In January, 1907, the mayor of the city of Boston transmitted a message to the city council recommending the appointment of a Finance Commission which should conduct an investigation into the finances of the city. That it might be a representative body, it was recommended by the mayor that one member therefor be nominated by each of the following organizations:

The Associated Board of Trade  
The Chamber of Commerce  
The Boston Merchants' Association  
The Clearing House Committee  
The Real Estate Exchange  
The Central Labor Union, and

A committee composed of the presidents of the several citizens' or local improvement associations in the various sections of the city.

The city council complied with the recommendations of the mayor by passing an order in the early spring of 1907 providing for the appointment by the mayor of a Finance Commission to be composed of one representative from each of the organizations suggested in his message. It was ordered that the commission serve until December 31, 1908, unless dissolved by its own vote before that date, and that vacancies occurring therein be filled by an appointment made upon the recommendation of the organization upon whose recommendation the original appointment was made.

*Functions and Powers of the Commission*

It was further ordered:

Such finance commission shall examine into all matters pertaining to the finances of the city, including debt, taxation and expenditures, shall give public hearings, and shall in particular inquire:

1—Whether under the present practice of the city its objects of expenditure are rightly divided between those which may properly be provided for by loan and those which should be met by taxation, and whether its loans are now issued for proper periods.

2—Whether the present distinctions between loans inside and outside the debt limit are based upon sound financial principles.

3—Whether any change should be made in the present system of accumulating sinking funds and issuing new loans annually.

4—Whether debt, taxation or assessments upon property are now excessive, and, if so, in what manner the same can be reduced.

5—Whether present systems of bookkeeping, auditing and administration afford sufficient protection to the city treasury.

6—Whether the cost of any municipal works or services now paid for from the city treasury should be raised by special assessment, or whether any changes should be made in existing provisions for the laying and collecting of special assessments.

7—Whether the financial burden imposed upon the city in connection with the expenditures for the construction and maintenance of metropolitan works is excessive or unfair, and, if so, how the same can be reduced or made equitable.

8—Whether any changes should be made in the present distribution of powers relative to appropriations, loans and expenditures.

9—Whether the general taxation laws of the state, and particularly those relating to the taxation of the property of corporations, operate fairly in respect to the interests of Boston, and, if not, what changes should be made in them.

10—Whether appropriations and loans for the several departments of the city are larger than necessary.

11—Whether the limit of municipal indebtedness should be fixed by constitutional amendment, or the present statute, fixing the limit, should be repealed or amended.

It was further ordered that the Finance Commission inquire

1—Whether it is advisable to create new sources of revenue, and, if so, to suggest the sources and for what purpose the proceeds should be applied.

2—To inquire into the present general plan of sewer construction and report whether or not it is the one best adapted to the city, and, if not, to investigate and report a comprehensive scheme for future development of the sewer system, with special reference as to the amount of money the city can annually afford to spend for the completion of work already begun.

The city council appropriated the sum of \$50,000 to meet the expenses which the Finance Commission would have to incur in the pursuit of its investigations.

*Powers of the Commission*

To facilitate the work of the Commission, the legislature was petitioned to grant it the power to compel the attendance of witnesses and the production of books and papers. By Chapter 481 of the laws of 1907, the Commission was given the following powers:

To summon witnesses and enforce their attendance.

To order the production of books, papers, agreements, and documents.

To administer oaths in accordance with the provisions of Chapter 175 of the Revised Laws.

These powers were to be exercised by the Commission only until the thirty-first day of December, 1908.

*The Reports and Recommendations of the Commission*

The Commission organized itself for active work on July 30, 1907, and from that date until January 29, 1909, when the final report was issued, interim reports were made on the investigations which were being conducted. Technical experts were employed as needed, and their findings were published by the Commission. The final report stated the conclusions reached and contained an account of the changes recommended by the Commission as to administration and as to the fundamental structure of the city government.

The legislative measures which the Commission regarded as essential to enable the people of Boston to redeem their government were summarized as follows:

- 1—A simplified ballot, with as few names thereon as possible.
- 2—The abolition of party nominations.
- 3—A city council consisting of a single small body elected at large.
- 4—The concentration of executive power and responsibility in the mayor.
- 5—The administration of the departments by trained experts, or persons with special qualifications for the office.
- 6—Full publicity secured through a permanent Finance Commission.

The Commission closed its report with these words:

“These measures will enable a good mayor and city council to give the citizens a really good administration, will

encourage indifferent men to keep a fairly straight course by freeing them from the partisan fetters of the present system, and will deter bad men, if elected, from demoralizing the public service and using the public money for their own advantage.

"The task set before the commission was to devise a practical working form of government for the city of Boston; not a charter for some other city; much less a charter good for all cities. It is under no illusion that the changes recommended will of and by themselves secure good government. No municipal charter can be a self-executing instrument of righteousness. If the people want the kind of government they have had during the past few years, no charter revision will prevent it. If, as the commission believes, they desire good government, the plan suggested should enable them to obtain and keep it."

Appended thereto was a draft for a new city charter; one of the provisions of this proposed charter was the establishment of a permanent Finance Commission, which, in order that it might be independent of city politics, should be appointed by the governor.

*The Boston Charter of 1909 and the New Finance Commission*

In 1909, a bill was passed by the senate and house of representatives relating "to the administration of the City of Boston and to amend the charter of the said city" and became Chapter 486 of the Acts of 1909. This bill was substantially the new charter proposed by the Finance Commission, although a number of minor changes were made. The sections relating to the appointment of the Finance Commission were as follows:

"Within sixty days after the passage of this act, the governor with the advice and consent of the council shall appoint a finance commission to consist of five persons, inhabitants of and qualified voters in the city of Boston, who shall have been such for at least three years prior to the date of their appointment, one for the term of five years, one for four years, one for three years, one for two years, and one for one year, and thereafter as the terms of office expire in each year one member for a term of five years. Vacancies in the commission shall be filled for the unexpired term by the governor with the advice and consent of the council. The members of said commission may be removed by the governor with the advice and consent of the council for such cause as he shall deem sufficient. The chair-

man shall be designated by the governor. His annual salary shall be five thousand dollars, which shall be paid in monthly instalments by the city of Boston. The other members shall serve without pay.

"It shall be the duty of the Finance Commission from time to time to investigate any and all matters relating to appropriations, loans, expenditures, accounts, and methods of administration affecting the city of Boston or the County of Suffolk, or any department thereof, that may appear to the commission to require investigation, and to report thereon from time to time to the mayor, the city council, the governor, or the general court. The commission shall make an annual report in January of each year to the general court.

"Whenever any pay roll, bill, or other claim against the city is presented to the mayor, city auditor, or the city treasurer, he shall, if the same seems to him to be of doubtful validity, excessive in amount, or otherwise contrary to the city's interest, refer it to the finance commission, which shall immediately investigate the facts and report thereon; and pending said report payment shall be withheld.

"The said commission is authorized to employ such experts, counsel and other assistants, and to incur such other expenses as it may deem necessary, and the same shall be paid by said city upon requisition by the commission, not exceeding in the aggregate in any year the sum of twenty-five thousand dollars, or such additional sums as may be appropriated for the purpose by the city council and approved by the mayor. A sum sufficient to cover the salary of the chairman of the commission and the further sum of at least twenty-five thousand dollars to meet the expenses as aforesaid shall be appropriated each year by said city. The commission shall have the same right to incur expenses in anticipation of its appropriation as if it were a regular department of said city.

"For the purpose of enabling the said commission to perform the duties and carry out the objects herein contemplated, and to enable the mayor, the city council, the governor, or the general court to receive the reports and findings of said commission as a basis for such laws, ordinances or administrative orders as may be deemed meet, the commission shall have all the powers and duties enumerated in Chapter 562 of the acts of the year 1908 and therein conferred upon the commission designated in said act; but counsel for any witness at any public hearing may ask him any pertinent question and may offer pertinent evidence through other witnesses subject to cross-examination by the commission and its counsel."

*The Organization and Work of the New Finance Commission*

The new commission authorized by the above act, organized itself on June 24, 1909 and prepared to continue the work of its predecessor. It was realized, however, that the new commission would not be obliged to investigate past methods and practices; its duties would consist chiefly of keeping current watch over the administration of the city's business.

Since 1909 the work of the Commission has divided itself into three classes:

1. Reports to the governor, to the general court and to the committees thereof on legislative bills affecting the financial interests of Boston.
2. Constructive reports to the mayor, city council, and the school committee recommending economical improvements in the departments of the city so as to reduce the administrative cost thereof.
3. Critical reports to the city government on particular acts of mal-administration in various municipal departments.

*Results Obtained by Commission*

The scope of the work of the Commission is so broad and the lines of studies so varied that to give an exact description of them would involve a list of the reports which have appeared in its annual volumes from 1910. It is sufficient commentary on the work of the Commission to state that the net debt of the city has actually decreased in the last eight years and the borrowing of money outside of the debt limit has practically ceased. Furthermore, the old and ancient custom of an annual or "pork barrel" loan bill has passed away and not once has an attempt been made to revive it.

Among some of the large achievements of the Commission are its report on the survey made on the Boston school system in 1911 and the report recommending the adoption by the city of Boston of the segregated budget system. The latter system was adopted this year and has thus far demonstrated its usefulness for the city.

The school department has co-operated cordially in the Commission's investigation of its departments and recently a new survey has been made of the school system, the results of which will shortly be published by the Commission.

The annual appropriation of the Commission amounts to approximately \$30,000 and the Commission has on its staff a permanent force of eight employes.

## CHAPTER II

### THE BUREAU IN PHILADELPHIA<sup>1</sup>

#### THE FIRST MUNICIPAL RESEARCH VENTURE OUTSIDE NEW YORK

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##### *Initial Steps*

The organization of the Philadelphia Bureau of Municipal Research by a group of public-spirited citizens was due to a recognition of the value of the service rendered to New York by the bureau in that city. The older bureau, begun in 1906, had been working for two years with such success that it seemed to several men of affairs in Philadelphia that the methods employed in New York could be applied with like success in their city.

Thus came about the organization of the first of the chain of bureaus of municipal research to follow the lead of the parent organization. The plan was thought of not as the result of some civic scandal nor was it an emergency measure (like the commission plan in Galveston) but was a calm, orderly program, deliberate and dispassionate.

After a preliminary visit by Dr. William H. Allen, one of the three directors of the New York bureau, a number of the Philadelphians interested in the proposed new bureau visited New York and were entertained at a dinner by Mr. R. Fulton Cutting, the chairman of the board of the parent organization. Plans were discussed and after a few more meetings and conferences a sum of \$12,500 was pledged for an experimental period of six months. Offices were engaged at 634 Real Estate Trust Building and these rooms were formally opened on Monday, November 9, 1908, by a staff detailed from the New York Bureau, under Mr. Henry Bruère, another one of the triumvirate then directing affairs in the New York organization.

##### *Getting into City Hall*

One of the first things to be done, naturally, was to get access to the offices in City Hall, and a letter to Mayor Reyburn, signed

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<sup>1</sup> Prepared for MUNICIPAL RESEARCH, by Mr. Frederick P. Gruenberg, Director of the Philadelphia Bureau of Municipal Research.

by twelve prominent citizens of various political beliefs, was submitted. At the same time the newspapers were apprised of the plans.

The letter to the mayor told briefly of the methods and results in the New York bureau, and pointed out that the proposed work in Philadelphia was also to be impersonal, scientific and co-operative, that confidential working relations with officials, with a view to improving conditions, would be the *modus operandi* rather than the traditional muck-raking which had theretofore characterized all brands of "reformers" and "uplifters."

#### *The Mayor Sceptical*

His Honor was not entirely convinced, however, and although the newspapers were for the most part interested and sympathetic, Mr. Bruère had hard sledding and soon decided that for him, at any rate, the Philadelphia situation was impossible. Nevertheless, the organizers of the new movement felt convinced of its potential usefulness and they were determined to keep on.

#### *Early History*

Dr. W. R. Patterson served as the local representative of Mr. Bruère until January, 1909, when Dr. Frederick A. Cleveland, another director of the New York Bureau, took charge. Rufus E. Miles was then the local representative of Dr. Cleveland who traveled to Philadelphia from New York frequently to direct the staff. Mr. Miles left after a short time to assume the position of director of the Cincinnati Bureau, which was then being organized and Mr. F. W. Powell of the staff was placed in charge of the staff in June, 1909. Later in the year Dr. Jesse D. Burks joined the staff, and, in January, 1910, Mr. Powell and Dr. Burks were both designated as directors with Dr. Cleveland as advisory director. Dr. Burks resigned in June, 1911, to become associated with the New York School Inquiry, and Mr. Powell's title was changed to Secretary. In September, 1911, Dr. Burks returned and Mr. Powell, who is now on the staff of the New York Bureau of Municipal Research, resigned.

#### *The Experimental Stage Over*

After the preliminary period of six months, during which the Bureau had worked on a number of studies, it was perfectly clear to the group behind the movement that it was most distinctly worth while, and it was decided to incorporate a local



body separate from the New York bureau. This was done in the autumn of 1909.

#### *Access to Departments*

Access to the city departments (i.e., those under the mayor) was for some time formally withheld, but Dr. Martin G. Brumbaugh, now governor of Pennsylvania and then superintendent of schools of Philadelphia, permitted the Bureau to work in the department of education, with highly satisfactory results. Some of the studies in the education department will be briefly discussed on the following pages.

The way in which contact was finally established with the departments under the mayor is interesting and illustrates very well the general attitude of many officials. When the Bureau had been denied access to the mayor's departments it went to work, nevertheless, as best it could, and started studies on the outside. It made a report on the medical inspectors in the bureau of health and submitted it to Dr. Joseph S. Neff, director of the department of public health and charities. Director Neff took the report to Mayor Reyburn and asked permission to invite the Bureau of Municipal Research into his department for co-operation. Naturally the mayor wished to know why this request was made and Director Neff stated that the Bureau had submitted to him a statement of existing conditions that the administration could not afford to have published before steps were taken to correct them. Dr. Neff pointed out that the Bureau had put itself in the attitude not of hostile attack, but of helpful co-operation and that he felt that no public officer should refuse the co-operation of a citizen body when offered in such a spirit. This request was granted and one by one the other directors in the mayor's cabinet changed their attitude from one of hostile suspicion to one of requests for help.

The closing days of the Reyburn administration found the Bureau in friendly and helpful relations with the city departments. During the hotly contested campaign of 1911 both candidates stressed "efficiency" and "a business administration" in all of their campaign utterances. The Bureau took no sides during that campaign but submitted a letter to each candidate demanding a definition of his attitude towards the program for which the Bureau stood. Each candidate hastened to express most unequivocally his approval of that program and of his intention, if elected, to follow it out to the limit. When the

successful "reform" candidate, Rudolph Blankenburg, assumed office, the Bureau continued its activities in the departments under the mayor, and enjoyed most harmonious relations in nearly all cases with the department heads, and their subordinates.

Valuable contact was also established in the early years of the Bureau with Captain John M. Walton, the city controller. Controller Walton had been in office many years and had earned a reputation for honesty and for the able administration of his department. The work in co-operation with the controller was destined to be among the most important accomplishments of the Bureau, and some of the details will be gone into in a later section.<sup>1</sup>

#### WORK DONE IN THE BOARD OF EDUCATION

Reference was made above to the early contact of the Bureau with the school officials and for that reason we shall advert to the work done on problems connected with the Board of Education first. For the reason that the topics will be grouped more or less by the organization units concerned it may not be quite possible to refer to the various studies of the Bureau in strictly chronological order.

#### *Study of the Bureau of Compulsory Education*

The most significant piece of work, perhaps, in the field of educational administration was the study of the bureau of compulsory education (often referred to as the "truancy department") resulting in a revolutionary reorganization of that bureau. The work of gathering the data was done during 1909 and the report was submitted to Dr. Brumbaugh, superintendent of schools, early in January, 1910. He in turn referred the report to the board of education who promptly pigeonholed it. The superintendent was sympathetic with the report's recommendations and favored action along the lines it suggested, but he was naturally powerless to overcome the apathy of the school board or of the committee to which the document had been referred. After patiently waiting for several months for some sign of

<sup>1</sup> In this connection it may be of interest to readers outside of Philadelphia to learn that the "City Controller" in Philadelphia is not a "city" official but a "county" official, as is also the City Treasurer. The city and county of Philadelphia are coterminous and are in effect one and the same thing, but the fictitious distinction is kept up.

response to its recommendations, the Bureau of Municipal Research forced the issue by inquiring of the educational authorities whether they would care to publish the Bureau's findings or whether the Bureau should itself give publicity to its report. This blunt maneuver had the desired effect, for the authorities thereupon took up the report with the chief of the bureau of compulsory education and he promptly resigned without further urging. That action opened the way for a drastic overhauling of the whole bureau. A school principal, who possessed in a marked degree the qualifications set up in the constructive recommendations, was made chief and this step was followed energetically by others recommended by the Bureau of Municipal Research with the result that instead of being an inefficient, almost useless refuge for numerous incompetent placeholders, the bureau of compulsory education became almost a model of its kind. The social and educational significance of such a complete reorganization can be appreciated when it is remembered that the bureau of compulsory education is charged not only with the duty of enforcing the compulsory school-attendance laws, but also includes among its duties the issuance and control over working-permits to minors and the taking of the school census. Moreover, the enforcement of the famous new Pennsylvania child labor law is lodged with the bureau of compulsory education.

#### *Negro Education*

The study made by the Bureau of Municipal Research of negro education in Philadelphia is another important piece of work in the field of education. This exhaustive research was mainly pedagogical and psychological in character and was, therefore, somewhat outside the usual field of the Bureau's activities, which is usually confined to problems of administration, accounting, engineering and finance. There were experts on the Bureau's staff at the time, however, who were peculiarly well qualified to undertake such a highly specialized study, and the work proved to be of great value. The report prepared was subsequently printed by the United States Bureau of Education, and the recommendations contained in it were influential in shaping the policies of the Philadelphia school authorities in the matter of negro education. These policies are still in force and are believed to make for the best interests of white and colored pupils alike.

*Other Educational Studies*

Ten other educational assignments were made in the Philadelphia Bureau resulting in pieces of work of varying lengths and of widely different degrees of importance. Principal among these were the studies of special schools and of the department of supplies of the board of education. The former inquiry resulted in a complete reorganization under a competent supervisor, and the latter furnished the basis for a radical change in the organization and methods of the whole department.

A complete digest (the first of its kind) of all the laws, ordinances and regulations pertaining to the schools was another of the highly useful results of the Bureau's work.

THE WEIGHTS AND MEASURES SURVEY

Most of the Bureau's work is, from its very nature, done in certain departments or bureaus already established as a part of government. The study of the weights and measures situation in Philadelphia was an exception, because of the fact that there was no bureau or department then in control of weights and measures. Hence the survey was of a set of social and economic conditions in the life of the community and not of a governmental organization unit. Careful investigations were made of the conditions surrounding the sale of a wide variety of commodities and a carefully drawn up report was submitted to Mayor Reyburn on March 3, 1911. Because of the special conditions just stated, it was entirely consistent with the Bureau's announced policy to give immediate publicity to this report, and copies of it were accordingly sent to all the newspapers. The mayor acknowledged the report, and in his letter he made it clear that the gravity of the situation had been brought home to him by the Bureau's findings. The editorial response to the Bureau's report was immediate and effective. A great deal of news-column space was also given, and as a result of the public sentiment created by this publicity, legislation was introduced at the next session of the general assembly making provision for more adequate control of weights and measures in cities of the first class.<sup>1</sup> The new legislation went into effect on January 1, 1914, and provided for the creation of a bureau of weights and measures under the county commissioners' department. While it is unfortunate, no doubt, that the legislature saw fit to put

<sup>1</sup> Philadelphia is the only city of the first class in Pennsylvania.

the new bureau in a department already much too diversified functionally, and exempt from civil service, yet its creation was a step forward and the weights and measures situation has been vastly improved.

#### REFORMS IN ACCOUNTING AND FINANCE

The accounting side of the Bureau's work is very often the only one that suggests itself to the average person casually interested in its activities. In many respects the accounting and financial work are the most useful parts of the Bureau's program, and certainly they are fundamental, and indispensable to any scheme of effective governmental improvement. It is quite natural therefore that a large part of the money and energy of the Philadelphia Bureau should go to studies in the accounting and financial field.

##### *Installation of Modern Accounts*

Prior to 1909, the accounts of every city department (including the controller's office) were in effect merely memoranda of cash transactions, and assets other than cash belonging to the city were not taken care of by any systematic record or control. The Bureau co-operated with the controller for several years in installing modern fund and expense accounts in his office and work was done in a number of other bureaus and departments in introducing expense and stores accounts along greatly improved lines. Most of this constructive accounting work was done in such important bureaus as charities, water, and electrical.

##### *The Controller's Manual of Accounting*

The new accounting procedure was greatly facilitated by the compilation by the controller's office of a manual of accounting, which was printed and distributed to the various departments, bureaus, and other units. In the preparation of this manual the Bureau of Municipal Research co-operated, as it did in the introduction of the methods and procedure set forth in the book.

##### *Budget Work*

The most costly single study ever gone into by the Philadelphia Bureau is the work on budget-making, but the Bureau's trustees, the staff, and the more enlightened public officials feel that the money was well spent. In spite of the fact that an immense amount of work still remains to be done, in spite of the

frequently taken view that our budget procedure in Philadelphia is still floundering about in the experimental stage, it needs but a glance at what was done in the years before the Bureau of Municipal Research began its work on the budget to convince the most sceptical of the value of the progress that has been made. In those days, but a few years back, the word "budget" was not even used in connection with municipal finances, and there was general confusion between capital outlays and expense; between loan funds and revenues.

The estimates of the various departments and bureaus in the city government were submitted independently of each other, without any control or review by any centralized responsible authority. Obviously, such methods precluded the use of the budget as an instrument for setting forth any definite financial program for the city, and thwarted any attempt at citizen criticism or control. Hence the Bureau set to work and in co-operation with the controller's department prepared a uniform classification and a systematic budget program. This was accepted by the mayor, but up to the present writing councils have not agreed to the program except in parts. Even though the budget success is admittedly but partial, tremendous gains have been made in the new interest in the budget on the part of the public which has been aroused, and in the clearing away of the old chaos, leaving a clear opportunity for building up better methods.

#### *Other Financial Studies*

Numerous other financial and accounting studies were undertaken by the Bureau—indeed, there is never a time when at least one member of the staff (and generally more than one) is not engaged in inquiring into some problem pertaining to financial administration. These other financial studies cannot be discussed at any length because of the limitations of space. These pieces of work include a calculation of the expected borrowing capacity of the city for the next ten years, co-operation for periods of varying length with a number of city bureaus in solving their accounting problems, a survey of the board of revision of taxes, work with the mayor's committee on new sources of revenue, and a number of others.

#### WORK IN THE HEALTH BUREAU

On a previous page, reference was made to the earliest contacts with the strictly city departments (i.e., those under the mayor)

and the report on the medical inspection service was cited. After the Bureau secured satisfactory relations with public officials, it was in the health bureau that many of its most interesting and productive studies were made.

#### *Digest of Health Laws*

One of the pieces of work done in the bureau of health that resulted in incalculable benefits to the public officials there, was the compilation of a digest of all the laws and ordinances pertaining to public health. These were formerly scattered through numerous volumes and the health authorities and their employees were in frequent difficulty because of the lack of a comprehensive legal guide. Because of the fact that the health officials' time was already fully taken up with their usual duties, they found it impossible to give the amount of time, as well as energy, needed for such a job as making a digest, and the proffer of help from the Bureau of Municipal Research was heartily welcomed. The work proved so satisfactory that the department of public health and charities printed the digest—a 250-page octavo volume, and it is in constant use.

#### *Medical Inspection of School Children*

A complete survey of the division of school medical inspection, followed by a critical and constructive report, resulted in a complete reorganization and standardization. An almost immediate effect of this work was an increase of 50 per cent of treatment obtained for children with physical defects.

#### *Milk Inspection Service*

The Bureau made an exhaustive study of the milk inspection, service and followed its report by an effective publicity campaign. The mayor appointed a commission of six experts and this commission backed up the Bureau's proposals. A complete revision of the milk regulations and a reorganization of the inspection procedure followed.

The Bureau was one of the four co-operating agencies in the "Milk Show" of 1911, Mr. Arthur E. Post of the staff acting as executive secretary of the show. This show gave a tremendous impetus to the various educational and child-saving movements organized in the period immediately following it.

### *Hospitals*

In the contagious disease hospital the Bureau made a rather extensive survey, at the time the new plant was about ready for occupancy in 1909, introduced a system of accounts and records, and made numerous suggestions as to administration.

At the Philadelphia General Hospital ("Blockley") careful study was made of the resident and visiting staffs and a number of recommendations were the basis of a valuable self-examination by the latter. Modernization of business procedure—introduction of stores control, standardization of specifications for supplies, and similar improvements—were brought about through the Bureau's co-operation.

### *Food Survey*

In 1914, the Henry Phipps Institute invited the Bureau to join it and the University of Pennsylvania in a joint survey of the conditions under which foodstuffs were sold in Philadelphia. The Bureau's part of the survey was to include the city's inspection service and general control over the handling of foods, and a careful report was submitted to the director of public health and charities as well as to the chairman of the health committee of councils. Many of the defects criticised were due to inadequate appropriations, and data from other cities were furnished to emphasise this inadequacy. The city administration has changed since the publication of the report and there has been no evidence either on the part of the old administration or the new of any serious effort to put through the needed changes. Hence the Phipps Institute contemplates the early publication of the reports prepared, in the hope that adequate publicity may be the means of securing both the needed appropriations and the administrative improvements called for.

### *Other Health Work*

Other assignments in the department of health and charities included work in the divisions of vital statistics, of housing and sanitation, tenement house inspection and child hygiene.

## THE WORK IN POLICE AND FIRE

### *The Patrolman's Manual*

For seventeen years there had been no revision in the pocket manual carried by each police officer for his guidance. A new



manual, up-to-date in every respect, and containing in compact form the vast amount of information needed by every policeman, was drawn up and a copy given to every member of the force. Some of the work on this manual, as well as most of the installation of the other plans for improving methods in the department of public safety, was done by Capt. Martin H. Ray (formerly U. S. Army) who was detailed to serve as special aide to Director George D. Porter, but who remained on the Bureau staff and payroll.

#### *School of Instruction and Other Police Reforms*

In the course of his work in the bureau of police, Capt. Ray organized the school of instruction in order to increase the standards of efficiency of the force. The school proved to be very valuable, as a number of other cities which took up the same idea, also found. Other matters of procedure in the police bureau were gone into by members of the Bureau of Municipal Research staff, some of the most concrete results being printed general orders in place of oral instructions, the introduction of efficiency records as a basis for promotion and discipline, and the establishment of more effective control over police property.

#### *Work in the Fire Bureau*

As was done in the police bureau, a school of instruction was established in the bureau of fire, in order that the experience of the best informed officers might become available to the newest recruits. Steps were taken to have men already in the service also get the benefit of the school's training.

The mayor appointed a commission on fire prevention of which Mr. Powell Evans, a trustee of the Bureau, was chairman, and Dr. Burks, the director, was secretary. This commission led the movement for systematic fire-prevention. Inspection districts were organized, a number of firemen were detailed and trained as inspectors, and through the co-operation of Director Porter, Chief Engineer William H. Murphy and Fire Marshall Mallory of the fire bureau, a systematic and effective program of fire-prevention work was made possible.

#### *Electrical Bureau*

The electrical bureau has functions outside of its work for the bureaus of police and fire although its activities are indispensable to them, and it is in the same department. In that important

bureau (expense over \$1,800,000 for 1915) the Bureau of Municipal Research did a considerable amount of co-operative work with its chief, Clayton W. Pike, resulting in a thorough reorganization of administration and personnel, as well as other improvements, in addition to the accounting changes mentioned elsewhere.

#### CO-OPERATION WITH THE PUBLIC WORKS DEPARTMENT

##### *Work in the Highways Bureau*

By co-operating with former Director Morris L. Cooke, the head of the public works department, the Bureau was able to perform a great deal of effective work. The most extensive service in any of the public works' bureaus was in highways where Chief William H. Connell strove successfully to introduce better methods. In his bureau, the Bureau of Municipal Research assisted in the complete rearrangement of the offices and physical equipment (including the removal of forty-five tons of rubbish), in the establishment of modern systems for handling the filing and correspondence, and in reorganizing the inspection service so as to eliminate the duplication formerly resulting from the employment of separate inspectors for highways and street cleaning. The reorganization of the highways bureau put it on an engineering basis—one hundred trained engineers being employed whereas formerly there had been but one.

##### *In the Bureau of City Property*

One of the most satisfying and readily appreciable results of the Bureau's activities in the public works department was a study of the janitorial service in city hall, under the jurisdiction of Mr. William H. Ball, then chief of the bureau of city property. The study showed a cost of \$115,000 per annum for cleaning city hall, the unit cost averaging two and one-half times that of nearby office buildings, which, it was patent, were better cleaned. The unit cost in city hall varied in different offices from five cents to fifty-five cents per square foot. Immediate reorganization resulted in an annual saving of \$30,000 with better service.

##### *Some Other Public Works Activities*

Other work in connection with public works matters included co-operation in solving administrative and office management problems in the director's office, work on cost accounting in the water bureau (alluded to in another connection), a study of the

lease of the city's gas works to the United Gas Improvement Company, and the preparation of a digest of laws governing the department.

#### CIVIL SERVICE

The Bureau had done comparatively little work in the field of civil service, until the time when Mr. Ralph Bowman was made its director, on November 1, 1914. Then a vigorous program of salary standardization was begun and excellent progress was made, with the civil service commission enthusiastically co-operating. The former commission, of which Mr. Frank M. Riter was president, was succeeded early in 1915 by a new commission, presided over by Mr. Robert M. Griffith, and the same interest in and co-operation with the salary standardization program was shown.

A vast amount of preliminary work has been done and a compilation of comparative salary data has been printed. This document will serve as a basis for contemplated future work in connection with salary standardization. A few words as to the Bureau's plans in this connection, will follow on a later page.

#### STANDARD SUPPLIES SPECIFICATIONS

Philadelphia has a central purchasing agency for the strictly city departments, bureaus and other units. It is known as the department of supplies and it was contemplated in the act creating the department that virtually all city purchasing would be centralized there. As a matter of fact, it continued to be the practice for many of the offices and institutions to do the greater part of their purchasing themselves, thus preventing the attainment of the expected advantage through specialized and scientific purchasing methods. Mr. Herman Loeb, then the director of the department of supplies, was able with the Bureau's assistance to bring about a much greater centralization of purchasing. Moreover, the Bureau formulated standard specifications for a large part of the supplies bought by the city, which specifications were adopted by the department.

#### FIRST WORK IN THE COURTS

The Philadelphia Bureau had an opportunity for rendering a service in a type of governmental unit in which most bureaus of municipal research and like civic bodies have as a rule done little work. In February 1915, the Municipal Court, which had begun

operations only about a year previously, found that its domestic relations division was having difficulty in taking care of its records and social statistics. President Judge Charles L. Brown realized the difficulty of the problem and invited the Bureau of Municipal Research to survey the division with a view eventually to introducing the Hollerith system of compiling information. The Bureau accepted the invitation with the proviso that it need not confine itself merely to the problem of tabulation, and it proceeded to make a report on the organization, methods and procedure of the division. It devised a new system for keeping case records and installed a complete system of mechanical tabulation of the social and procedural data of the domestic relations cases.

#### A MULTIPLICITY OF OTHER JOBS

Nor are the above described activities all that the Philadelphia Bureau has carried on, by any means. If all of the others were given even the scant attention accorded the above pieces of work, this paper would be unduly lengthened. To illustrate in some measure the variety of the Bureau's efforts, however, a mere enumeration of some of the hitherto unmentioned assignments may be in order. They include an inquiry into the use of mandamus in Philadelphia, an investigation of city control of billboards, a study of the fire insurance on city property, a study of licenses and new sources of revenue in co-operation with the Mayor's Advisory Committee on Finance, a survey of the heating and ventilation of school buildings, a brief survey of the sheriff's office, an examination of the committee system of councils, and several others.

#### SOME VALUABLE BY-PRODUCTS

The stated corporate purposes of the Bureau do not, strictly speaking, include certain of its activities which are, nevertheless, of great value and which the writer has frequently referred to as analogous to the valuable by-products of an industrial plant.

#### *Training for Public Service*

The Philadelphia Bureau has no facilities for extensive training for public service. Moreover, it feels that formal schools for that purpose were better concentrated in effective units in one or two great centers than for each bureau of municipal research to attempt to build up a training school for itself, but the work

on the Bureau's assignments is in itself a most useful training for expert public service. The Philadelphia Bureau takes great pride in the fact that since its inception it has furnished to various public departments especially well qualified staff members, all of whom have furnished a high grade of service to the city. Those who have left the Bureau for service to the city, and the positions they have filled are:

Mr. Will B. Hadley, Chief Accountant, City Controller's office

Mr. Lorin C. Powers, Chief Clerk, Board of Education

Mr. Raymond M. Slotter, Secretary to the Director, Department of Public Safety

Mr. Arthur E. Post, Special Inspector, Department of Public Works

Dr. Neva R. Deardorff, Chief of Division, Division of Vital Statistics

Mr. Philip F. Hamberg, Accountant, Bureau of Highways

Mr. Harry C. Agnew, Accountant, City Controller's office

Miss Maude E. Stearns, Statistician, Municipal Court

It is interesting to note that of the foregoing, half were appointed by "organization" department heads, while the other half were appointed by "reformers." Of the eight, five are still in the city's employ, one has gone to another field of public service, one was recalled to become assistant director of the Bureau, and one has gone into business.

#### *Co-operation with Other Agencies*

Another community service of the Bureau consists of co-operation with other civic and social agencies. For these services the Bureau has sometimes been reimbursed at direct cost, but not in all cases. To illustrate the types of agencies to which the Bureau has extended such service, the mention of a few will suffice. They include the Home and School League, the Vice Commission, the Housing Association, the Chamber of Commerce and the Octavia Hill Association (housing).

#### *Publicity*

Another kind of work that is important, although it is, to be sure, incidental to the Bureau's main program, is the publicity and propaganda activity. It may be supposed that this covers the fund-raising—the promotion work—but that is quite a sub-

ordinate feature, as the funds have been raised for the most part very quietly and by personal contact, rather than by large scale advertising.

The Bureau's publicity work has consisted mainly in the publication of a weekly bulletin, known as *Citizens' Business*, in which, as a rule, but one topic in municipal government is discussed. The bulletin is designed to be of use to the busy citizen whose time does not permit an extended study of the various civic problems, but whose interest and knowledge are profitably stimulated and extended by a brief and pithy discussion of the "high spots" on any given topic. These bulletins have frequently been reprinted in various newspapers, have often formed the basis of news articles and editorials, and they have been favorably commented upon by a great many readers, not only in Philadelphia, but in other cities as well.

Frequent addresses to civic clubs and other gatherings are made by the director and his colleagues, and special articles for magazines and other periodicals are written from time to time.

#### *Information Service*

The use of the Bureau of Municipal Research as a general information bureau on the part of Philadelphians is rapidly extending, and in addition to local inquiries by telephone, letters, and callers in person, the Bureau is in daily receipt of inquiries from other cities for information not only about its work but also as to facts concerning the city and its government. To many of these inquiries the Bureau's staff is naturally able to make immediate reply. In connection with a considerable number of others, however, the preparation of a reply frequently involves some investigation, or at least the assembling of data already gathered, so that the service proves rather costly. In the opinion of the Bureau's management, however, this service is distinctly worth while, and is a justifiable use of a fractional part of the funds contributed for the Bureau's work.

#### WHAT DO THE OFFICIALS SAY?

Many of the friends of the Bureau, prospective contributors, interested citizens, and civic agencies in other cities ask from time to time what is the attitude of Philadelphia officialdom towards the Bureau. That can best be judged from what the officials themselves have had to say about the Bureau and its work.

Governor Brumbaugh just before leaving the superintendence of schools wrote:

"When the Bureau of Municipal Research was established in Philadelphia, I think I was the first to avail myself of its services. Dr. Burk at my request took up an investigation and study of the Bureau of Compulsory Education, and made such a very thorough and satisfactory report upon the status of that department, and such constructive recommendations for its reorganization as to enable us speedily to place it upon an entirely new and modern basis. It has been greatly increased in efficiency by reason of the work of your Bureau.

"This service alone was one of the most memorial that any organization could render to the school system of the city.

"Subsequently, the Department of Supplies was studied in the same thorough manner, and important reorganizations occurred in that Department as a result. I believe that today we are saving large sums of money and placing the supplies more speedily in the schools, by reason of the report of the Bureau.

"These are but types of many services rendered from time to time, all of which were of an important and helpful character; and I wish to reconfirm my confidence in the efficiency of the Bureau and my gratitude that it has always acted in an impersonal and unselfish way in trying to do good for the public service of the city."

Rudolph Blankenburg, Mayor 1912-15, had this to say:

"The administration has deeply appreciated the assistance rendered by the Bureau in the preparation of the last two annual budgets. The radical improvements in their form, both in comprehensiveness of statement and in clearness of presentation, would have been impossible but for the expert services of the Bureau.

"This has been only one of many lines along which the Bureau has been of service to the present municipal administration. Their suggestions for improvements in the organization of various departments and bureaus, and for the introduction of better office methods, and their co-operation in the solution of the larger financial problems of the City, have been of very great value to myself and my Directors.

"I am most glad to acknowledge these obligations and to express the hope that the work of the Bureau may be continued and expanded to the benefit both of the Administration and of the City."

Capt. John M. Walton—City Controller since 1895—in a letter to Dr. Cleveland wrote:

"In response to your request for some expression from me as to the value of the work of the Bureau of Municipal Research, I would state that during the six years the Philadelphia Bureau of Municipal Research has been in contact with the department of City Controller under your general direction, I have found its co-operation very helpful. During the period mentioned this department has been engaged in improving the city's methods of accounting, reporting and budget making, and in preparing the text of the manual of accounting, reporting and business procedure, in all of which work it has received valuable assistance from the Bureau."

Dr. Joseph S. Neff, for six years director of Health and Charities, wrote as follows:

"I desire . . . to express my personal appreciation to your Bureau for the very valuable services which you have rendered, in increasing the efficiency of the Department. Since the organization of your Bureau I

## THE PHILADELPHIA BUREAU

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believe our efficiency has been increased many times, much of which was due to your work; and therefore, one of my last official acts is to acknowledge service rendered."

In the annual report of the Municipal Court of Philadelphia for 1915, President Judge Brown says:

"The establishment of a system of mechanical tabulation has been well done. Through the assistance of the Bureau of Municipal Research, we are able to present in this volume valuable tabulation of social data, to which reference has already been made.

"The co-operation of the Bureau has been of the highest value. It has been available for consultation in reference to contemplated changes and improvements, and from time to time has voluntarily offered practical suggestions which were promptly adopted. The system of mechanical tabulation of social data in the Domestic Relations Court, and those cases in the Criminal Court involving unmarried mothers, will eventually be extended to every branch of the Court in which this system may be applicable. The Court is pleased to acknowledge the continued co-operation of the Bureau of Municipal Research."

Besides the foregoing excerpts the Bureau has in its files a number of other expressions of opinion from prominent officials, showing that the Bureau has most decidedly made good in the judgment of the public administrative officer. These views are from officials of varying shades of political opinion—from "reformers," and from supporters of both branches of the "organization."

### REACTION OF THE PRESS

Editorial comment on the Bureau's work has been almost uniformly commendatory, the writer being able to recall but two instances of deprecatory treatment. In a front page news article during the Mayoralty campaign of 1915, an effort was made by one newspaper to interpret a bit of news relative to the use of graduate students in Bureau investigations as a partisan political move on the Bureau's part. The same paper expressed itself as follows in an editorial on a report issued a couple of years ago:

"The Bureau of Municipal Research has issued a pamphlet, enriched, if one may fairly use the word, with pictures and diagrams. . . . The idea underlying the whole project is a good one, though fanciful, and if carried out with exceptional wisdom might be of service; though there will always be against it the instinct of caution which all normal people have in respect of a body undertaking governmental work without warrant of law. In this case, the instinct of caution justifies itself fully since it appears that the Bureau, like other bureaus, is made up of jobholders; salary eaters; differing in no respect in this point from what are called by certain elements 'political bureaus.'"

The report referred to received enthusiastic approval from all the other papers, which have always shown an intelligent and sympathetic appreciation of the Bureau's methods and results.



A number of kindly things have been said editorially and otherwise, but of this number a very few excerpts will show the place made for itself by the Bureau in the opinions of the leading newspapers. An old and influential morning paper said in a leader a few weeks ago:

"There already exists in Philadelphia an agency well equipped for such a task, whose co-operation might well be sought by Mayor Smith if he be in earnest. The Bureau of Municipal Research, with its staff of trained accountants and investigators, ought already to be in possession of the facts upon which to base a complete program for the reorganization of the city's accounting and financial system. That, and nothing short of that, is what Philadelphia must have if it is to put its money affairs on a scientific basis and lift them out of the reach of the incompetent and unscrupulous jugglers who have handled them in the past, to the confusion and embarrassment of the municipality. The bureau has performed an invaluable service in the past, fully justifying the outlay for its maintenance made by the public-spirited citizens who are directing its endeavors. It has been able to perform this service by maintaining an attitude of strict neutrality with respect to local politics . . . Its own record will be a sufficient safeguard against the slightest suspicion of factionalism or partisanship, and if it will tell what it knows and outline what ought to be done to remove the stain of blundering inefficiency that has been fastened upon Philadelphia by amateur accountants and crooked politicians, its endeavor will receive the enthusiastic approval and support of the intelligent taxpayers of Philadelphia. The Mayor would find it 'good politics' to call for the immediate co-operation of the Bureau of Municipal Research, and the bureau should, and will no doubt, be ready to respond to such a call."

An evening paper with a wholly different viewpoint and a constituency quite unlike the venerable publication just quoted, made the following comments in reference to a Bureau publication:

"Constructive criticism of financial methods under which the city is conducted, and a comparison of figures for several years past, is contained in the pamphlet issued today by the Bureau of Municipal Research. . . . Pertinent facts are presented in the pamphlet with the idea of providing the basis for comparison in the difficult problems which the city must face the next few years."

These quotations are characteristic, with the exceptions above noted, of all the publicity given the Bureau's activities.

#### LOOKING FORWARD

The Bureau's past record of accomplishments having established beyond the shadow of a doubt the need and usefulness of such an agency in Philadelphia, it now regards itself as a permanent agency—not an experiment, not a sporadic expression of discontent, but a calm, orderly medium for approaching municipal problems on a basis of facts, and equipped to solve those problems by research methods.

The Bureau will continue to follow out the purpose stated in its charter:

"To serve Philadelphia as a non-partisan and scientific agency of citizen inquiry, which shall collect, classify, and interpret the facts regarding the powers, duties, limitations, and administrative problems of each department of the city government; to make such information available to public officials and to citizens, in order that inefficient methods of administration may be eliminated, and efficient methods encouraged; and to promote the development of a constructive program for the city that shall be based upon adequate knowledge and consideration of community needs."

The immediate program of the Bureau is full of promise and very interesting. For obvious reasons, some of the work planned cannot be touched upon in any publication. Other plans again are contingent upon the plans of the new city administration.

Specifically, the plans for the near future provide for the continuance of constructive work on a financial program for the city. That broad term includes budget improvement, accounting reforms, and the development of a consistent and harmonious borrowing-policy.

The salary standardization work will go on. Mayor Smith, the civil service commission, and Chairman Gaffney of councils' finance committee are deeply interested and the mayor has announced his intention to appoint a special commission to direct a program of standardization of salaries. The Bureau is ready to furnish such a commission with a large number of data already collected which will be of incalculable value to the commissioners to be appointed, and also any further service which may be required.

A most momentous plan was announced by Chairman Gaffney in his address at the annual dinner of the Philadelphia Bureau, early in April. It was to draft what will be in effect a new charter for the city, with home rule powers, especially in respect of finance. Councilman Gaffney welcomed the Bureau's co-operation in this most promising project and it is hoped that, before very long, he and the Bureau may both find the time to get together on the work.

Other work will be taken up as the opportunities arise. If the present is any index of the future the problem for the Bureau's directorate will not be to find work but to use proper judgment as to what to eliminate in the tempting opportunities ever before it. The difficulty is, and probably will be for some years, to decide, in view of restricted funds and a limited staff, what to choose from among all the things that need to be done.

## CHAPTER III

### THE CHICAGO BUREAU OF PUBLIC EFFICIENCY<sup>1</sup>

#### *Relation of the Bureau to the Merriam Commission*

The Chicago Bureau of Public Efficiency came into existence in August, 1910. It was an indirect outgrowth of the Chicago commission on city expenditures, commonly known as the "Merriam Commission." This was an official body created by resolution of the city council, and appointed by the mayor. Its membership comprised aldermen and citizens. Mr. Charles E. Merriam, professor of political science in the University of Chicago and a member of the city council, was its chairman. Another important member, who also acted as counsel for the commission, was Mr. Walter L. Fisher, afterwards Secretary of the Interior in President Taft's cabinet.

The Merriam commission, being a creature of the city council, of course confined its investigations to the expenditures of the city government, strictly speaking. Thus a number of local jurisdictions escaped the scrutiny of that commission.

#### *Establishment of the Bureau as a Citizen Agency*

When the Merriam commission after about one and one-half years of brilliant and successful activity was about to terminate its labors, it was thought by a number of public-spirited citizens that it would be highly beneficial to have an unofficial body which would continue the same general lines of work and which would carry on continuously analytical and constructive studies of the organization, activities, and expenditures not only of the city government but also of the several other local governments above mentioned, at the same time suggesting plans for the betterment of the public service. The consummation of this idea resulted in the organization of the Chicago Bureau of Public Efficiency.

The trustees of the Bureau are appointed by the directors of the City Club of Chicago, the president of which is ex-officio a trustee of the Bureau. There is no other connection, however,

<sup>1</sup>Prepared for MUNICIPAL RESEARCH from information furnished by Mr. Harris S. Keeler, Director of the Chicago Bureau of Public Efficiency.

between the Bureau and the City Club. Mr. Julius Rosenwald, president of Fears, Roebuck & Company and prominent in many lines of business and civic activity, has been the chairman of the board of trustees of the Bureau since its organization. The other members of the board are Alfred L. Baker, treasurer; Onward Bates; Charles R. Crane; Victor Elting; Walter L. Fisher; Allen B. Pond; George G. Tunell; and F. I. Moulton. In the beginning Alderman Merriam was a trustee; later he resigned because of the pressure of work upon him as a member of the city council.

The first director of the Bureau was Mr. Herbert R. Sands, at present an assistant director of the New York Bureau of Municipal Research, who had been brought to Chicago from New York to assist in the work of the Merriam commission. Mr. Sands remained with the Bureau as director until January 1, 1912, when he resigned. Following the retirement of Mr. Sands, Mr. Harris S. Keeler, who had been acting as legal counsel for the Bureau, was placed in charge of the work as director, a position which he still holds. Mr. George C. Sikes was secretary until October 1, 1915, when he resigned.

The Bureau began operations with pledges for financial support aggregating nearly \$120,000. This amount proved sufficient for carrying on the work for a period of approximately three and one-half years. In 1914-15 new subscriptions were secured aggregating approximately \$30,000 a year for a five-year period.

#### *Studies in Local Governments*

At the outset it was planned to carry on inquiries into the affairs of practically all the different Chicago governments simultaneously. The territory comprising Chicago is cursed with a multiplicity of governing bodies, most of which escape the light of publicity that is directed upon the city government. There are the county government, the sanitary district, and several independent park boards. The board of education, the library board, and the tuberculosis sanitarium also have separate taxing powers, though their trustees are named by the mayor. Their jurisdiction and principal functions, as well as their plans of organization, are described in the report on the "Nineteen Local Governments in Chicago," described subsequently.

The difficulties in maintaining rigid scrutiny over so many diverse and complicated schemes of local government were found to be almost insurmountable and it was finally decided to

restrict the range of the Bureau's activities. It was thought that better results would be obtained by concentrating from time to time upon a more limited number of specific problems. In pursuance of this latter policy considerable work has been done in connection with the affairs of the county government. This accounts in part for the fact that so many of the reports of the Bureau relate to that subject. It accounts in part, also, for the fact that more reports have not been put out recently, since during the past two years considerable work has been done in the county fee offices, the results of which were presented orally to the judges of the circuit court but were not embodied in published reports.

*Constructive Measures Recommended by the Bureau*

The legislature in 1915 passed a comprehensive act concerning the manner in which the county treasurer shall hereafter handle the public funds entrusted to his custody and the interest thereon, as well as the matter of publicity for his accounts. The provisions of this bill follow closely the recommendations of the Bureau. The initiative in securing the passage of this bill was taken by the Citizens' Association. The Bureau co-operated, however, in drafting the measure and in urging its passage before the legislature.

The legislature at its last session also passed an act for the consolidation of the several park governments of Chicago with the city government. This bill also follows closely the recommendations made in the Bureau report on the park governments. It will not become effective until approved upon a referendum vote.

The principal inquiries upon which the Bureau is at present engaged are a study of the water works system of Chicago on which it is expected a report will be forthcoming during the present year, and a study of the economies that might be effected by the consolidation of all of the local governing bodies now having jurisdiction within the territory comprising Chicago.

*Summary of Chief Accomplishments*

In 1915, the Bureau issued a booklet explaining its aims and mentioning a few of its accomplishments, which were listed as follows:

1. Timely action on the part of the Bureau has so far prevented the payment by the City of Chicago of three

quarters of a million dollars in the disgraceful voting machine "deal." Litigation is now under way which, there is reason to believe, will be successful in saving this entire amount for the taxpayers.

2. The Bureau exposed the practices in the County Treasurer's office which have resulted in the loss of large amounts of interest to the County. During the four-year term of the last County Treasurer this loss amounted to considerably more than \$500,000. As a result of the disclosures made by the Bureau, the newly elected County Treasurer pledged himself before election to account for every dollar of interest earned on funds handled by him; also to keep books and records which shall be open to public inspection and which shall show his deposits of public moneys with the banks and the interest earnings thereon. Heretofore, the public has been denied information on these matters.

3. For three successive years the Bureau has submitted to the Judges of the Circuit Court data which have enabled them to effect a large saving in expense to the County by materially reducing the number of employes in the County fee offices over which the Judges have jurisdiction. The amount of this saving has been estimated at not less than \$100,000 a year. Acting upon such data, the Judges have also been able to induce several of the officials whose offices were affected to adopt changes in organization and methods which have resulted in increasing the efficiency of the offices. These changes in organization and methods are important also because they insure permanently the annual saving in salary expenditures above referred to.

4. The inquiry of the Bureau into the organization and methods of administration of the several park governments of Chicago emphasized the need for consolidating the park governments with the City of Chicago, and the large saving to the taxpayers—estimated at \$500,000 a year—which could be effected by such consolidation.

5. The way in which the Bureau serves a very useful purpose as a center of exact information on matters affecting local governing bodies is well illustrated by the part it has played in explaining the effect of tax rates in connection with bills for proposed park consolidation. There are very few persons in the community who understand the process of tax levying in such a way that they can explain the effect of proposed changes in rates. The Bureau was responsible for calling the attention of civic organizations and of legislative and council committees to the fact that, as first proposed, park consolidation bills—meant to be measures of economy—in reality carried tax levy provisions that would operate to bring about heavy tax increases.

6. When occasion requires, the Bureau offers information and recommendations to the voters upon propositions relating to expenditures coming before them. The Bureau first directed public attention to the provisions for salary "grabs" contained in the proposed amendments to the Municipal Court act which were submitted to the voters and defeated at the election of November, 1911. These amendments proposed uncalled-for increases in the salaries of officials of the Municipal Court amounting in the aggregate to about \$165,000 a year. Through their defeat, the City has already saved this amount for three years, a total of \$495,000. This illustrates how, in many cases, when a useless expenditure is once prevented, the saving effected accumulates from year to year thereafter, especially when there is an organization like the Bureau in the field looking out for a recurrence of the objectionable measure or expenditure.

7. Prior to the election of April 7, 1914, at which proposed bond issues of the City of Chicago and of the County of Cook totaling \$8,700,000 were submitted to a referendum, the Bureau issued a statement to the voters advising the approval of two of the propositions, amounting together to \$820,000, and the rejection of the others, amounting to \$7,880,000. The vote at the election accorded precisely with the recommendations of the Bureau. The two propositions recommended were carried; the other four were singled out for defeat.

8. In 1911 the Bureau criticised certain restrictions contained in the coal specifications of the Board of Education for 1910. As a result of this criticism, the restrictive clause was taken out, and in 1911 twenty-nine bids were received as against six bids in 1910. The price of coal at the mines and freight rates were both higher in 1911 than they were in 1910. Notwithstanding these facts, the bids were about 75 cents a ton less in 1911 than they had been in 1910 and the aggregate saving to the Board of Education on the one year's purchase of coal was about \$90,000.

9. The publication entitled "The Nineteen Local Governments in Chicago" is perhaps the most broadly educational in scope of any of the reports of the Bureau. It shows the complexity of our local government due to the "multiplicity of overlapping taxing bodies with many elective officials." Unification of local governments and a short ballot are pointed out as the greatest needs of Chicago. So great was the demand for this report that an edition of 10,000 copies was exhausted within a year from the date of publication. The report has been extensively used as a text book in the public schools of Chicago.

The foregoing are only a few of the many important matters upon which the Bureau has been engaged. Not all of the results obtained can be measured in dollars and cents. The moral influence which an organization of this sort exercises in deterring the useless expenditure and waste of public funds is very great and should not be overlooked. Moreover, the publicity which the Bureau investigations have given to many defects in governmental organization and administration should ultimately bring about fundamental changes in conditions which will result in enormous savings and much better service to the public.

#### *Relations of the Bureau with Public Officers*

For the most part the relations of the Bureau with public officials have been entirely friendly and it has had little difficulty in obtaining free access to their books and records. Occasionally it has met with opposition. The most conspicuous instance of this sort was the refusal of the last county treasurer to permit an examination of his records relating to bank deposits and the interest earnings thereon. Many of the Bureau's recommendations, of course, have not been sympathetically received and acted upon by officials. On the other hand, the judges of the circuit court in determining the amount of help to be employed in the county fee offices, especially for the years 1913 and 1914, accepted freely the assistance and co-operation of the Bureau. Mr. Alexander A. McCormick, who was president of the board of Cook county commissioners during the two years beginning December, 1912, and his supporters on that board were especially solicitous for the aid of the Bureau and always welcomed its suggestions.

#### *Some Opinions of the Work of the Bureau*

Among the opinions that have been expressed by officials, organizations and newspaper editors in a position to know of the effectiveness of the Bureau's work, the following are typical:

"The Chicago Bureau of Public Efficiency is, in my judgement, the most effective agency of its kind that I know of. It is honest, efficient, intelligent, and through the work which it has done the County has been able to save about \$250,000 a year, and this saving is getting larger every year. I can say very frankly that if Mr. Keeler had not been here last year to give us information and advice this sum of money would have been lost to the citizens of Cook County."

A. A. MCCORMICK, President of the Board of Cook County Commissioners. (Jan. 1914.)

" . . . In preparing our report for the Judges we were assisted by your Bureau. To prepare and arrange the data submitted to us by the Bureau must have required months of arduous and tactful work in the various offices, checking up the amount of work done by the several employes,—disclosing some duplications and inefficiency of help, and, also, antiquated methods



of business. . . . We think this work resulted in much greater efficiency in the offices affected and, also, in a large saving of expense to the County."

JESSE A. BALDWIN, FREDERICK A. SMITH, CHARLES M. WALKER, Judges of the Circuit Court. (Jan. 1914.)

"From information obtained almost wholly from your Bureau, it was possible for the Finance Committee to make a budget that was fair to every department and to every employee, at a saving of more than \$200,000, notwithstanding we increased the salaries of a large number of employees receiving less than living wages.

"Should the County of Cook, the City of Chicago, the Sanitary District and the Park Systems give you free opportunity for investigation, and the various bodies making up the budgets for these departments make use of the information you could give them, I would feel confident a saving of \$3,000,000 to \$5,000,000 per annum could be made without reducing the efficiency of any department; in fact, I believe it would improve them, and without reducing the salary of any efficient and fully employed man now in the service."

E. M. BOARD, former Chairman of the Finance Committee of the County Board. (Jan. 1915.)

"During my term of service as County Commissioner your Bureau has on many occasions been the only source of information upon which those of us who wish to be governed by the facts could base our action. I want also to commend the uniform fairness which characterizes your statements. You are rendering invaluable service."

AVERY COONLEY, former Commissioner of Cook County. (June, 1914.)

#### *Newspaper Editorials*

Only a few excerpts from favorable editorials in Chicago newspapers will be given here. The support that the newspapers have afforded the Bureau has been generous and very helpful. The following are examples:

*Chicago Tribune*, Nov. 13, 1913:

"The report of the Bureau of Public Efficiency on the administration of the office of county treasurer is the most important the Bureau has made up to this time. . . . The report demands a showdown and the public will back that demand."

*Chicago Record-Herald*, Jan. 3, 1913:

"In its protest against recognition by the city council of the voting machine contract,—a scandalously improvident one from any point of view,—the Bureau of Public Efficiency made out an extraordinarily complete case. And the council in unanimously striking out the appropriation for voting machines, admirably suited action to argument. No intelligent person could read the able document and say that the issue was one of politics or personal opinion."

*Chicago Examiner*, Jan. 7, 1914:

"The Chicago Bureau of Public Efficiency has taken up the demand for a short ballot to simplify the election problems of the city. This advisory and volunteer body is fulfilling a function the worth of which is beyond dispute; it may be depended upon to uncover whatever there is of dry rot, incompetence, extravagance or other diseases to which a bureaucracy is subject."

*Chicago Daily News*, Dec. 29, 1913:

"In a report entitled 'The Nineteen Local Governments in Chicago,' the Chicago Bureau of Public Efficiency sets forth existing conditions

which lead it to assert that the greatest needs of Chicago are the unification of the community's many governing bodies and a short ballot. This graphic report ought to do much to stimulate the movement for simplification of our ludicrously complex local system of transacting public business."

Chicago *Evening Post*, Dec. 29, 1913:

"Of vital interest and importance to the people of Chicago is the latest report issued by the Bureau of Public Efficiency. . . . We urge the study of this report by all citizens who wish to be informed on one of the biggest problems facing the voters."

Chicago *Tribune*, Dec. 29, 1913:

"Nothing could be more timely than the report of the Bureau of Public Efficiency on local government in Chicago, 'a multiplicity of overlapping taxing bodies, with many elective officials'. The report declares:

"Chicago's greatest needs are unification of its local governments and the short ballot."

"Every citizen should read the Bureau of Efficiency's reports and study its striking charts. Then he should make himself the militant champion of simplification and the short ballot."

#### *Publications of the Bureau*

Since its organization, the Bureau has issued 26 publications. Two of these were reports prepared by the Merriam commission and were published by the Bureau, after the city had failed to print them, so that the material in them might be available for general use.

The publications, and their date of issuance are given below:

1. Method of Preparing and Administering the Budget of Cook County, Illinois. January, 1911.
2. Proposed Purchase of Voting Machines by the Board of Election Commissioners of the City of Chicago. May, 1911. (Out of Print.)
3. Street Pavement Laid in the City of Chicago: An Inquiry into Paving Materials, Methods and Results. June, 1911. (Out of Print.)
4. Electrolysis of Water Pipes in the City of Chicago. July, 1911. (Out of Print.)
5. Administration of the Office of Recorder of Cook County, Illinois. September, 1911.
6. A Plea for Publicity in the Office of County Treasurer. October, 1911. (Out of Print.)
7. Repairing Asphalt Pavement: Work Done for the City of Chicago Under Contract of 1911. October, 1911. (Out of Print.)
8. The Municipal Court Acts: Two Related Propositions Upon Which the Voters of Chicago Will Be Asked to Pass Judgement at the Election of November 7—Vote No. October 31, 1911. (Out of Print.)
9. The Water Works System of the City of Chicago. By Dabney H. Maury. December, 1911.
10. Bureau of Streets; Civil Service Commission; and Special Assessment Accounting System of the City of Chicago. December, 1911.
11. Administration of the Office of Coroner of Cook County, Illinois. December, 1911.
12. Administration of the Office of Sheriff of Cook County, Illinois. December, 1911.

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13. Administration of the Office of Clerk of the Circuit Court and of the Office of Clerk of the Superior Court of Cook County, Illinois. December, 1911.
14. The Judges and the County Fee Offices. December 19, 1911.
15. General Summary, and Conclusions of Report on the Park Governments of Chicago. December, 1911.
16. The Park Governments of Chicago: An Inquiry Into Their Organization and Methods of Administration. December, 1911.
17. Offices of the Clerks of the Circuit and Superior Courts: A Supplemental Inquiry Into Their Organization and Methods of Administration. November, 1912.
18. Administration of the Office of the Clerk of the County Court of Cook County, Illinois. November, 1912.
19. Office of Sheriff of Cook County, Illinois: A Supplemental Inquiry Into Its Organization and Methods of Administration. November, 1912.
20. Growing Cost of Elections in Chicago and Cook County. December 30, 1912.
21. The Voting Machine Contract. A Protest Against Its Recognition In Any Form by the City Council of the City of Chicago. January 1, 1913.
22. The Office of County Treasurer of Cook County, Illinois. An Inquiry into the Administration of Its Finances with Special Reference to the Question of Interest on Public Funds. November, 1913.
23. The Nineteen Local Governments in Chicago. December, 1913. (First Edition.)
24. The Bond Issues to Be Voted Upon April 7, 1914. March 30, 1914.
25. A Second Plea for Publicity in the Office of County Treasurer. July 9, 1914.
26. The Nineteen Local Governments in Chicago. March, 1915. (Second Edition, revised.)

CHAPTER IV  
THE DAYTON BUREAU OF RESEARCH<sup>1</sup>

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The Dayton Bureau of Municipal Research was organized in October, 1912, with the following declaration:

"The Bureau of Municipal Research is a non-political civic organization, supported by voluntary contributions of citizens. Its purpose is to give the public accurate, complete data relative to the condition of the city government; and to co-operate with city officials in the installation of the most modern systems of conducting public business.

D. FRANK GARLAND, President,  
MISS A. IRENE DILKS, Secretary,  
L. D. UPSON, Director."

The Bureau was really one of the first results of an awakening of Dayton citizens to the unsatisfactory conditions existing within the city government, and its organization preceded the adoption of the charter seeking to remedy those conditions.

*Dayton's New Charter and Its Origin*

It cannot be fairly assumed that the Dayton charter was a distinct product of the disastrous flood of March, 1913. Activity for a new government was inaugurated fully six months prior to this disaster, and by January 1, 1913, the project had acquired considerable momentum. The aftermath of the flood only accentuated an already apparent need for honest, efficient and responsible city management. "Government by deficit" embodies the actual reasons for the change in administration, and typifies conditions prevailing in the municipality. The city had had for many years a government sterile of all but the most commonplace benefits—due in some measure to official incompetence, but in larger degree an accrual of citizen neglect.

A constitutional amendment was adopted in Ohio on September 3, 1912, extending to municipalities a large measure of home rule, and allowing such cities as desired "to exercise all powers

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<sup>1</sup>It prepared for MUNICIPAL RESEARCH by Mr. C. E. Rightor, Director of the Dayton Bureau of Research.

of local self-government, and to adopt and enforce within their limits such local police, sanitary and other similar regulations as are not in conflict with general laws." The act provided that municipalities might, by initiation of the city council or upon petition, hold a special election to decide whether a charter should be drafted, and select the members of the drafting body at the same time, and it further provided that it might accept one of three "model" charters or continue under the municipal code of the state.

In the Autumn of 1912 the Chamber of Commerce appointed a committee of five to consider initiating a charter for the city of Dayton. The chairman was John H. Patterson, president of the National Cash Register Company, and an unusually public-spirited man. Extended thought and study were given by this committee to the three fundamental types of city government, the outlines of which were presented in the charters prepared by the State. These were the Federal, the Commission Plan and the City-Manager Plan. It was the opinion of the committee of five and of the Dayton Chamber of Commerce that the type of administration similar to that existing in their own private businesses was best fitted to secure the most desirable results in the conduct of public business. Subsequently, the committee severed its connection with the Chamber of Commerce and formed itself into a distinct body to secure the charter, believing such a movement should not be forwarded entirely by a commercial organization.

#### *Bureau of Municipal Research Organized*

Mr. Patterson gave the matter of city government his closest personal attention, and to aid him in arriving at the facts which would afford a basis for a charter resulting in a government of efficiency, he organized the Bureau of Municipal Research. Miss A. Irene Dilks, of this city, who had returned from New York City during the summer of 1912 after working several weeks in the New York Bureau, had reported to Mr. Patterson the nature of the New York Bureau and the success of its work. This led to Mr. Patterson's decision to inaugurate a similar movement in Dayton, and Dr. D. F. Garland, a prominent minister actively interested in local welfare problems, was made president and authorized to proceed to New York to find a director.

After interviews with several men in the Training School, Dr. Garland determined to recommend for the position in Dayton

Dr. Lent Dayton Upson, who had been in the New York Training School for Public Service, and who had been associated with the bureaus of municipal research in New York, Philadelphia and Cincinnati. Dr. Upson assumed management of the Dayton Bureau November 1, 1912, and remained in the position of director until March 23, 1915, when he became executive secretary of the National Cash Register Company of Dayton. He was succeeded by C. E. Rightor, also of the New York Training School for Public Service. After one year in private business, Dr. Upson determined to return to his first chosen field, that of municipal administration. He was associated with the Dayton Bureau during the two months following, assisting in effecting a reorganization of the Bureau by securing a board of trustees and obtaining financial support from a wider field of business men. This reorganization had just materialized when he was called to Detroit to assume the directorship of the Detroit Bureau of Governmental Research.

#### *Financial Support Given to the Bureau*

Since its inception, the Dayton Bureau had been supported financially almost solely by its founder, Mr. Patterson. It was felt that the more democratic and representative position properly belonging to a citizen agency might be realized through widening its managing board and extending the number of contributors. In May, 1916, this plan was carried out by the election of a board of fifteen trustees, and permitting a greater number of citizens to participate, by giving both moral and financial support to the movement.

#### *Staff of the Bureau*

During the existence of the Bureau the following persons have been at various times members of the staff: Miss A. Irene Dilka, who acted as secretary-treasurer of the Bureau until February, 1916; Arch M. Mandel, who resigned May 1, 1916, to become assistant director of the Detroit Bureau of Governmental Research; C. O. Dustin, now manager of the Bureau of Municipal Research at Springfield, Mass.; Winton L. Miller, now city manager of St. Augustine, Florida; C. A. Herbig, now city treasurer of Dayton; C. N. Lockwood, formerly of the New York Training School; and Mrs. Jeanne M. Illman, a social investigator. There have been associated with the Bureau in various investigations Dr. H. L. Brittain, A. N. Farmer, W. B. Heffernan

and Gaylord C. Cummin, now city manager of Jackson, Michigan. Almost all of the above have attended the New York Training School for Public Service. Dr. W. H. Allen, director of the New York Institute for Public Service, always has kept in close touch with the work of the Bureau. The New York Bureau of Municipal Research has made two departmental surveys and reports.

#### *General Work of the Bureau and Its Methods*

While the Bureau is concerned with the results being obtained in all governmental units, including schools, county, state and federal government, as well as the municipal field, the work of the Dayton Bureau has been confined chiefly to the city government. Some assignments, however, have had to do with phases of state government and educational problems.

Co-operation has been universally the method pursued in all work with the city or other political subdivisions. City Manager H. M. Waite and the department heads under him always have given the closest attention and consideration, and almost invariably adopted such constructive suggestions as were made by the Bureau. It has been the custom of the Dayton Bureau not to make public reports of its work as it felt that the credit for the constructive work done in the city government rightfully belonged to the public officials who put it into effect.

Work is done by the Bureau staff upon assignment from the Director and is usually based upon a definite program covering a year or more. Of course, there are exceptions to this rule when unexpected problems of public interest arise which demand or merit attention.

The principal constructive work done and investigations made by the Dayton Bureau are to be credited chiefly to Dr. Upton, who, even after his temporary departure from the field of municipal administration, kept in constant touch with the program of the Bureau. The same principles of Bureau methods, however, have been followed by Mr. Rightor, who is continuing as director under the recent reorganization.

#### *The Reorganization of the Bureau*

Under the reorganization the name was changed to the Dayton Bureau of Research. It is financed by 150 contributors, representing individuals and business organizations. The Board of Trustees consists of:

#### DAYTON BUREAU OF RESEARCH

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Acting Chairman, J. F. Ohmer, President, Ohmer Fare Register Co.; Secretary, C. H. Bosler, Attorney; Treasurer, G. B. McCann, Treasurer, Dayton Engineering Laboratories Co. (Delco); F. J. Ach, President, Canby, Ach & Canby Co.; H. G. Carnell, Treasurer, National Cash Register Co.; S. H. Carr, Attorney; E. A. Deeds, President, Dayton Engineering Laboratories Co. (Delco); F. T. Huffman, President, Davis Sewing Machine Co.; C. F. Kettering, Vice President, Dayton Engineering Laboratories Co. (Delco); I. G. Kumler, Vice President, The Rike-Kumler Co.; J. A. Oswald, President, Kidder-Oswald Co.; J. H. Patterson, President, The National Cash Register Co.; F. H. Rike, President, The Rike-Kumler Co.; Adam Schantz, President, The Dayton Breweries Co.; H. E. Talbott, President, Dayton Metal Products Co.

#### *Summary of Work Done by the Bureau*

The following pages contain a summary of the chief matters undertaken from October, 1912, to May, 1916. In this statement of activities no attempt is made to give a complete record of the Bureau work nor is there any effort made to measure the time spent in labor by the staff.

#### APPROPRIATION ORDINANCE

Practically the first activity of the Bureau was to urge upon the council the value of an itemised budget in place of the partial lump sum plan then employed. Efforts were made to have the appropriations for the year 1913 restricted to actual anticipated income. For six years previous there had been an average annual operating deficit of \$60,000, although such was prohibited by law. The finance committee finally reorganized the department of safety in which a deficit was threatened and recommended that only actual income be appropriated in this division of government. This meant a saving of \$40,000 to \$60,000. For the first time, and at the request of the Bureau, public hearings were held on the appropriations ordinance, at which members of the Chamber of Commerce, Federated Improvement Associations and some of the heaviest taxpayers of the city were present.

#### *Budget of 1913 a Distinct Advance*

Finally, with the co-operation of the mayor and board of control, all of the city departments within his jurisdiction sub-



mitted their requests for funds in considerable detail. In the case of other divisions the Bureau detailed these requests. It was impossible to secure a uniform classification, but the budget of 1913 presented a distinct gain over any previous appropriation ordinance of the city. In February, the finance committee and the clerk of council pledged themselves to the plan of an itemized budget and to the preparation of uniform budget sheets for an appropriation ordinance for the second half year.

While the appropriation ordinance for the second half was made up from detailed estimates, the council endeavored to consume a surplus of approximately \$30,000 in salary raises. Despite extensive publicity and personal solicitation of councilmen, the Bureau was unable to defeat the ordinance, which was passed by a margin of one vote.

In December, 1913, a uniform expense classification suggested by the Bureau was used in all departments in making out estimates for 1914. In this connection several conferences were held with officers of the state bureau of accounting, on the making of more scientific budgets. The director of the Bureau was made a member of the local budget commission, and the Bureau practically prepared the appropriation ordinance for the city. This budget was a complete departure from the former scheme of appropriating, and it is believed to be equal to that prepared by any city.

#### *Classification of Accounts Unique*

In September, 1914, the Bureau began the revision of the budget classification and the preparation of new forms for the budget of 1915. This revised procedure was adopted and has since been followed, and each year the Bureau assists in its compilation. The classification of accounts in Dayton was devised by the Bureau and is unique in American cities, being based upon the nature of the goods and services, rather than the object of expenditure. The detailed work and compilation of the 1915 budget, as with previous budgets, were done by the Bureau. Owing to reductions suffered during the year from the original estimate of revenue, it became necessary in September to lessen the several appropriations by \$90,000. In making these cuts the city manager was assisted by the Bureau. Increased revenue to the amount of nearly \$5,000 during the year was suggested by the Bureau.

Revised forms for use by the various departments and offices in requesting funds for their needs for the year 1916 were devised by the Bureau, and tabulations of departmental requests were made. Since these requests were largely in excess of the estimated revenues, the Bureau followed the work of the city manager in reducing departmental demands by more than \$200,000. A suggestion from the Bureau that the people at the November (1915) election be asked to vote an extra mill tax for operating purposes was not availed of, although the additional revenue from this source would have overcome a reduction in returns from general taxes of \$165,000 below the previous year. Increased revenues amounting to \$34,500 were found by the Bureau by making retroactive the provisions of an ordinance relating to interest on moneys in the city depositories, which was passed in 1914, but which had never been made effective. This ordinance provided that interest should go into the operating fund of the city, rather than the sinking fund.

#### THE CITY CHARTER

Early in November, 1912, the Bureau financed the visit of Dr. Paul Tyner, a newspaper writer, to a number of commission-governed cities in the west and northwest. Dr. Tyner prepared a series of articles on the advantages of commission government, which appeared from time to time in the local press. Also in that same month the Bureau urged upon the Chamber of Commerce the necessity of immediate action relative to the new charter, if results were to be secured prior to the next general election. The Bureau suggested calling a meeting of persons representing all walks of life, which would serve as a nucleus of the citizens' committee to take charge of the charter campaign.

In December, 1912, the Chamber of Commerce secured the services of Mr. Lucius Wilson, who invited the Bureau to cooperate with him in naming a citizens' committee. In January, 1913, the Bureau took exception to the plan of government proposed by the Chamber of Commerce committee, on the ground that several sections were unconstitutional or contrary to the general laws of the state. The plans were changed, in accordance with the suggestions offered by the Bureau.

#### *The Campaign for a New Charter*

In January, 1913, the Bureau undertook to furnish to the campaign committee a fact basis for the change in charter. Material

#### CITIZEN AGENCIES FOR RESEARCH IN GOVERNMENT

was furnished for local advertising and an immense amount of literature relative to commission government distributed, including reprints of numerous articles appearing in magazine form, dealing with municipal subjects. A clerk was constantly kept at work, and the following were distributed from the Bureau office:

- 8,000 Copies—"Story of Short Ballot Cities"
- 3,000 Copies—"Commission Form of Government," H. B. Rice
- 3,000 Copies—"City Manager Plan," Sumter
- 5,000 Copies—"Shall we Change our Form of Government"
- 45,000 Copies—"Government by Deficit"

Practically half of the Bureau's time during this period was spent on publicity, speaking, preparing data, reporting speeches, writing circular letters and assisting the citizens' committee in general. It is estimated that 100 speeches were made by persons attached to the Bureau staff.

After the election of the charter commission, the Bureau, at the request of this commission, suggested an outline for a complete charter and recommended the appointment of five committees to consider as many divisions of the document. The director of the Bureau worked on the drafting of the proposed sections. With the exception of the civil service section, the drafts were accepted with minor changes. After the adoption of the charter the Bureau distributed approximately 5,000 copies of the same to interested persons. Hundred of copies have been sent to other cities upon their request.

#### REORGANIZATION OF GOVERNMENT

With the inception of the commission-manager form of government, on January 1, 1914, the Bureau assisted the officials to assume their duties. After the charter election, data were secured covering the organization of each department and sub-department within the city government. Charts were drawn showing each of the positions, with salary, and an accompanying digest of the duties of each employe. These were prepared in book form and were submitted to the newly elected commissioners. Also a tentative outline was prepared for the new government under the charter. Comparisons were drawn, as between old salaries and those proposed to be paid. The Bureau actively

assisted in the preparation of plans for the utilization of city hall space by the new departments.

A hand-book was prepared and distributed in this connection, covering the civil list, a statement of bond issues outstanding, digest of the city budget, and a summary of the charter and rules of the commission.

#### NEW SOURCES OF REVENUE

In November, 1912, at the request of the codifying commission of council, the Bureau collected and correlated data relative to fees for permits. With the co-operation of the city engineer, the Bureau reported on increases which have amounted to approximately \$10,000 annually by the creation or increase of amounts of the fees required. The increases in the building permit fee also augmented the return by approximately \$4,000 each year. In the summer of 1914 the Bureau, acting for the city commission, undertook a study of new sources of revenue.

#### REVENUE ESTIMATES

Beginning with the fiscal year 1913, on three occasions the Bureau prepared an analysis of the city income, which was sent to responsible officers and department heads, as well as being published in the press. In every case the city used the Bureau's figures to check the estimate of receipts. In 1914, the Bureau estimate was used as a basis for the appropriation ordinance. The estimate of receipts from municipal court, on this last occasion, was increased, against the best judgment of the Bureau. There was also an over-estimate of taxes, amounting to between \$25,000 and \$30,000. This was due to unforeseen financial conditions, which came to exist in 1914, and not to error. With the assistance of the detailed budget, cuts were made in appropriations sufficient to cover the deficit, and at the same time no material injury to the city government resulted.

#### MUNICIPAL COURT

During the period immediately following the flood of March, 1913, the Bureau called public attention to the fact that legislation affecting the city, and believed to be objectionable, was proposed in the State legislature. This act created the municipal court. In October, 1913, the Bureau defended a mandamus proceeding in the supreme court with a view to annulling the municipal court act. The matter was unfavorably decided,

from the point of view of the Bureau. The question was then referred to the city commissioners, but the legal department was prevented from carrying the case beyond the court of appeals, so the municipal court act has been allowed to stand.

#### POLICE COURT

Prior to the organization of the Bureau, Ralph A. Argabright, police court clerk, was alleged to have misappropriated public funds. Soon after its organization, the Bureau suggested that this case be investigated by the grand jury, but the county prosecutor refused. After considerable pressure was brought to bear, the city solicitor agreed to bring joint suit against Mr. Argabright and his bondsmen, looking to the recovery of the alleged embezzled funds. Following the assumption of office by a new prosecutor, a member of the Bureau staff laid before the grand jury facts which resulted in an indictment against Argabright. The accused was later convicted and given a reformatory sentence, but the penalty was suspended upon request of the Bureau, which was moved to ask clemency because of information given that the trial judge and county prosecutor would appreciate such a request. The Bureau refrained from bringing ouster proceedings, at the request of Mrs. Argabright, wife of the accused. This case attracted notable attention, and it is believed the publicity given the matter materially assisted in the success of the charter fight and that the ends of exact justice were best served by the request for clemency for Mr. Argabright.

#### CITY SQUARE PROPERTY

The city is the owner of considerable property, leased in perpetuity, but open to periodic re-appraisal. Not only are these leases inimical to the best interests of the city, but the re-appraisal in some instances was neglected for many years, and overdue rents were not collected. The Bureau secured data showing the loss accruing from non-appraisal, and in co-operation with a member of the council presented the information to the city council in December, 1912, asking that the court of common pleas proceed with the re-appraisal. Requests for this action were served on the common pleas judges by the clerk of council. One judge asked to be excused from service, while another requested that the matter be left to his successor.

With the incoming of the new administration it was suggested by the Bureau that it might be advisable to refuse to receive

#### DAYTON BUREAU OF RESEARCH

further rents upon some of this property, and particularly upon sections on which payments were in arrears, with the idea of condemning the private interest on these leases and including the territory in the comprehensive park program. In this connection, and through the casual inquiry made by the Bureau, the legal department of the city collected delinquent rents on Huffman Basin amounting to \$750. Subsequently, a re-appraisal of the city square property was made.

#### FLOOD RELIEF WORK

Immediately following the flood of March, 1913, all members of the Bureau staff actively engaged in relief work. Miss Irene Dilks became associated with the American Red Cross, acting as their local historian and doing regular visiting work. Charles Herbig was stationed at the National Cash Register Company, acting in a clerical capacity. Winton L. Miller had charge of the Memorial Hall relief station until a few days prior to its being closed. L. D. Upson acted as assistant director of the fourth sanitary district, under Dr. A. L. Light. This district employed 1,000 men and 50 teams. He also had charge of the Broadway relief station, which fed more than 2,000 people daily. Following this work Mr. Upson was appointed secretary of the Citizens' Relief Committee, acting in that capacity until the middle of July, when he resigned to again resume the directorship of the Bureau. In connection with the work of the Flood Relief Committee, Mr. Miller took charge of the publicity for the \$2,000,000 flood prevention fund, which was raised within six weeks by the voluntary subscriptions of the citizens of Dayton. While Mr. Upson was secretary of this committee the prizes offered by Mr. Patterson for the best suggestions as to how to bring about a betterment of Dayton were awarded.

#### DEPARTMENT OF SERVICE

##### *Division of Water*

Early in 1912 an examination was made of the financial condition of the municipal water plant, it being hoped that through a re-adjustment of meter rates and an economical administration the plant might be placed upon a self-supporting basis. While the city officials opposed any increase in rates, yet progressive steps were taken toward increasing the efficiency of this utility. The Bureau completely reorganized the accounting methods in

the bureau of revenue collection. Steps in this direction, together with more efficient and economical management, as well as added service, have placed the system on a self-sustaining basis.

#### *Bureau of Garbage Removal*

In November, 1912, a comprehensive study was made of the methods of garbage disposal, in order that recommendations might be made to the city council bearing on a solution of the problem. An investigation was made of the municipal plant at Columbus, with a result that certain corrective measures were suggested. In May, 1913, the Bureau secured the promise of the mayor and safety director that they would reject any bids submitted under the ordinance passed by council, providing for a continuance of the then unsatisfactory service. A counter-proposition was submitted, however, and the specifications were approved by the board of control and officials of the department. The bids under this ordinance represented a saving of \$22,000 in a period of ten years, so a contract was made and increased service assured. This contract was later thrown out by the courts. Inefficient collection prompted a member of the Bureau staff to follow garbage wagons for over a week. It was learned garbage teams were working 5.6 hours daily, yet charging 10 hours, and were hauling only two loads per day. Wide publicity was given this feature, and after introducing motor-driven vehicles in collection, re-districting the city, and forcing employees to give a full day's service, better results were obtained.

With the beginning of 1914, City Manager Waite secured the services of Hering & Gregory, an engineering firm in the East, who made a complete study of the garbage and refuse situation. This resulted in the construction of a municipally-owned garbage reduction plant south of the city. Already, this is operated on a basis that pays entirely for the cost of disposal, and in addition, gives a revenue nearly,—if not quite,—sufficient to pay for collection.

Cost records for garbage collection and disposal were introduced.

#### *Division of Engineering*

Numerous conferences were held with the city engineer looking to the installation of a unit cost system over the service of this division, but the matter is pending at present. Much time was spent with the engineering division working on the redistribution

of street lights throughout the city. Many lights were re-located and additional ones installed.

#### *Division of Public Lands and Buildings*

At the request of the Greater Dayton Association, the Bureau made a study of the public markets, outlining existing conditions, the character of vendors and the revenues received. Revenues from this source were increased, and additional public markets were established, including a children's market.

#### *Bureau of Motor Vehicles*

Cost records for motor vehicles were drawn up and installed by the Bureau.

#### *Division of Streets*

In December, 1912, at the request of the county prosecutor, the Bureau secured information relative to the illegal repair of streets. This was presented to the prosecutor. The Bureau made several ineffectual efforts to install a cost system over street repair. The superintendent was absent from the city for five weeks, on private business but at full city pay. A survey of the methods employed in the division of streets, however, led to the recommending of the reduction of the force to keep within anticipated appropriations, and the putting into operation of idle flushing and sweeping machines. This apparatus, however, was not used until the new administration took office.

In July, 1913, one member of the staff spent nearly his entire time checking up with one of the contractors on street paving. Notable delinquencies were found in the use of old brick, insufficient cement and excessive cuts in sheet asphalt. It is estimated the city saved \$25 per day on this last item alone. In addition, new pavement was laid according to specifications for the first time in years.

In connection with the work of the street department, the Bureau kept operation data on the new portable asphalt plant, and the same was published locally and in engineering magazines. The Bureau also investigated and reported to the Greater Dayton Association the failure of the creosoted wood block pavement on Grand Avenue.

With the introduction of the new administration, cost records were introduced for street maintenance and repairs.



*Grade Crossings*

At the request of a private citizen a report was made on the laws of other states pertaining to the elimination of grade crossings, and the apportionment of the costs as between the railroad companies and municipalities.

## DEPARTMENT OF SAFETY

*Division of Fire*

In July, 1913, the city issued \$119,000 in bonds for the complete motorization of the fire department. Previous purchases of such equipment had been under suspicion, so the Bureau requested the privilege of drafting specifications to cover the different types of machines to be bought. This was done, although the safety director declined to have these specifications passed on by recognized experts. The Bureau widely advertised the letting, and as a result 27 bids were submitted. The lowest responsible bidder was \$24,000 below the departmental estimate.

There were grave rumors of graft, so publicity was resorted to to prevent the contract going to the highest bidder. Later the Bureau requested the privilege of allowing a staff member to accompany the board of control on a junketing trip East. This request was granted, but the trip was immediately dispensed with. Finally two members of the board of control resolved to take no action on fire apparatus, allowing the new commission to settle the problem. Later the Bureau, through a survey of the fire department, made recommendations for the purchase and distribution of approximately \$69,000 worth of fire apparatus, in place of the amount originally intended. Fifty thousand dollars of the original bond issue was turned back into the sinking fund.

Much constructive work was accomplished in the division of fire, in putting into effect the recommendations made in the survey of this division by Mr. C. J. Driscoll, of the New York Bureau of Municipal Research. A complete set of records was drawn up, including a consolidated daily report to go to the desk of the director of the department each morning. The use of these forms was explained, upon installation, to the members of the force. Cost records for maintenance of fire horses were introduced.

#### *Division of Police*

Nearly the entire time of one member of the Bureau staff for more than a year was spent in the safety department. In carrying out the recommendations made in the survey of Mr. C. J. Driscoll, a reorganization of the division of police was effected, and a complete set of the forms of record mentioned in the survey was drawn up, and their actual use supervised. A consolidated daily report, to go to the director of safety, was installed. An ordinance was outlined, authorizing the employment of a sergeant of traffic, and a training school for members of the force was suggested.

A member of the Bureau staff accompanied 17 members of the safety department on an educational trip to New York City, and other points East, and arranged with the departments of police and fire in New York for the placing of these men, that they might receive valuable, practical experience.

#### *Division of Weights and Measures*

In co-operation with the director of safety, many of the recommendations contained in the safety department survey were put into effect in the division of weights and measures. Record forms were devised and installed, and the inspector given a clearer idea of his duties.

#### *Division of Building Inspection—Building Code*

The Bureau financed the entire cost of preparing for the city a complete, modern city building code. Mr. Fred W. Elliott, an architect, of Columbus, Ohio, was engaged to prepare the code, which is based upon the latest steps taken by the state code, and by national electrical and other societies in preparing regulations. The code, consisting of eleven parts, has been submitted to the city commission, and is being read at the present time.<sup>1</sup> Hearings were afforded builders, plumbers, electricians and others on the various sections, with a view of obtaining for Dayton the best possible building code.

The records consequent upon the establishment of a division of building inspection were outlined by the Bureau.

#### *Pension Funds*

At the request of the trustees of the police and fire pension funds, the Bureau made a study of the pension funds, and gained

<sup>1</sup> This report was prepared in May, 1916.

from the New York Bureau information tending to decide what means should be taken to best protect the present uniformed force.

DEPARTMENT OF PUBLIC WELFARE

*Division of Health*

Early in 1913 the Bureau co-operated with the board of health and the following improvements were inaugurated: A new system of filing and recording sanitary reports; the establishment of a pin-chart on contagious diseases; a revival of milk analysis after a lapse of two years; preparation of a score card system and more adequate inspection of dairies.

In May, 1913, the Bureau undertook a complete study of the administration of the board of health, through Dr. Carl E. McCombs, of the New York Bureau. An outline of constructive suggestions for extending the service and increasing the efficiency of the department was presented. A supplementary program of health activity for the summer months was outlined with the health officials. Dr. McCombs assisted in installing the records recommended and in reorganizing the division. Eight bulletins, consisting of the survey report and follow-ups were issued on this subject.

In the autumn of 1913, during a diphtheria epidemic, the Bureau wrote daily newspaper articles, based on facts emanating from the division of health, and secured wide publicity on the subject.

Early in 1914, at the request of Chief Health Officer Dr. A. L. Light, the Bureau assisted in the installation and revision of a complete system of record keeping. The Bureau has since been in continuous touch with this work. The Bureau prepared, published and distributed 20,000 cards each on the subjects of fly-swatting and the prevention of diphtheria.

*City Laboratory*

In February, 1914, a statement setting forth the needs of a city laboratory was prepared. This suggestion was quickly followed by the establishment of the bureau of bacteriology and chemistry. It is hoped to expand this laboratory into a general testing laboratory for all supplies needed by the city.

*Hospitals*

Reports were prepared on the financial condition of the Miami Valley and St. Elizabeth hospitals, and the number of

patients in each. On these findings it was recommended that no additional funds be appropriated by the city toward the support of public patients until an adequate system of accounting was installed, with a unit cost system. In September, 1914, the Bureau renewed these recommendations to a committee from the Greater Dayton Association, adding that it believed the hospitals should be compensated on a unit cost basis for patients who are really charity patients.

#### *Division of Correction*

In February, 1913, examination was made of purchasing activities at the city workhouse, and the result was a showing of serious abuses. In March, 1914, there was installed a system of cost and accounting records, covering the maintenance of prisoners. Consequent upon the recent acquisition of a municipal correction farm, the Bureau has undertaken a further study of the division's books of account and individual case records. Revision of these records is regarded as necessary because of additional activities on the farm, and to enable the director of public welfare to compile sufficient social records and statistics to make a study of causes of delinquency and crime.

#### *Bureau of Legal Aid*

In June, 1913, the Bureau tried to interest a local committee in the establishment of a free legal aid bureau in the city. The American Red Cross, of Cincinnati, appropriated funds for such purpose, but it was impossible to secure the co-operation of a committee of lawyers in the matter. In January, 1914, the city budget carried the sum of \$625 for the establishment of such a bureau, under the auspices of the welfare department. This legal aid bureau has proved very successful and popular in affording free legal assistance to those unable otherwise to obtain it. Its activities have included the driving of loan-sharks out of the city.

#### *Division of Recreation*

The Bureau, co-operating with the supervisor of recreation, enlarged the plans of the division, and recommended the establishment of additional social centers. The work in this division has been unified and enlarged more than one hundred per cent.

## DEPARTMENT OF FINANCE

*Division of Accounting*

Anticipating the installation of the new form of government, a complete study was made of the forms and procedure in the offices of the city auditor and treasurer. With the installation of the new government, and at the request of the department of finance, the Bureau undertook a complete revision of the accounting system, and the installation of new methods of procedure. This work was begun with the aid of the Cincinnati Bureau of Municipal Research, employed for that particular purpose. The procedure outlined was gradually introduced with the assistance of the Bureau. The system installed is the most modern in any city government and contemplates absolute control of public funds, as well as providing the means of determining the actual financial condition of the city at any time.

It has been necessary from time to time to devote some attention to the accounting procedure, and at the present time a complete investigation is being made with a view to determining the success of the system of accounting as originally devised upon the recommendation of the Bureau.

Many details of the procedure in this department were revised by the Bureau and put upon a stable basis. These activities relate to the method of handling discounts, signing warrants, retained percentage funds accounting, handling of trust funds, school teachers' pension funds, etc. Upon the recommendation of the Bureau two additional clerks were appointed in this department, one to handle the general books of account and to work on special assessments.

*Division of Purchasing*

Beginning in November, 1912, the Bureau undertook to collect information in support of a proposal for the establishment of a centralized city purchasing department. Stimulated by this activity, the city auditor installed a requisition system for the purchasing of supplies. This eliminated unauthorized expenditures, but was not a check on over-drafts. Beginning in September, 1913, blanks and procedure for the office of the purchasing agent were prepared ready for installation when the new government was placed in operation. This was among the first of the new functions of government to be completed.

Beginning in February, 1914, a study was made of the requis-

tions of 1913, looking to the classification of all supplies and materials consumed by the city. This classification was used as a basis for the 1915 budget. A purchasing register is kept, showing the amount of each article used, and this aids in the making of price agreements and contracts. Standard specifications have been prepared on about thirty standard commodities commonly used by the several departments, and the work of standardizing specifications on all supplies is being gradually done. The specifications for coal are unsurpassed by any government, and for fire, hose, paints, printed matter, etc., the requirements are set forth with every detail.

Upon the establishment of a central storehouse, to be operated under the city purchasing agent, the Bureau prepared the forms of record necessary to this activity, including a perpetual inventory, bid records, requisition forms, etc.

#### SINKING FUND

Early in 1913 a study was undertaken of the requirements of the sinking fund with a view to presenting a more equitable scheme of liquidating the funded liabilities of the city. It was found that the fund was absorbing 47 per cent of the city's revenue from taxes, and that it was impossible to put the fund on a scientific basis. In January, 1914, a complete statement of the city's bonded debt, classified by actual maturity, interest, etc., was submitted to the sinking fund trustees.

In connection with the 1915 budget it was decided to extend bond issues of \$75,000 in order not to seriously hamper the operation of the city. While this was practically borrowing for operating purposes, it was believed to be an expedient course at that time. The action was open to criticism, but could hardly be avoided in face of a demand for a lower tax rate.

Following the flood of 1913, the city began the issuance of sinking fund bonds instead of serial bonds, which had been issued heretofore. This policy was continued by the administration over the protest of the Bureau. The city attorney was prevailed upon to secure an opinion from the attorney general relative to the legality of sinking fund and serial issues. The decision was favorable to both kinds, so the Bureau urged the desirability of serial issues over the sinking fund plan. The manager, however, favors the sinking fund principle for bond issues.

**CITIZEN AGENCIES FOR RESEARCH IN GOVERNMENT**

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The annual interest and sinking fund requirements on all outstanding bond issues of the city were calculated by the Bureau and submitted to the finance department.

**SPECIAL ASSESSMENTS DEFICIT**

Owing to the existence of a deficit of approximately \$50,000 in the special assessment fund, the Bureau secured in 1915 the appointment of a clerk to check up this account and endeavor to recover to the city such portion of this deficit as may still be collected from the owners of property which was originally assessed.

**GENERAL ACTIVITIES OF THE BUREAU**

*Charities Surveys*

A series of charts was prepared showing the interlocking of social agencies within the city and the activities of the Department of Public Welfare. There was outlined a program suggesting a social survey of the city. This was presented through the women's committee of the Greater Dayton Association. The director of the Bureau was made a member of the committee to secure publicity, incidental to the raising of funds, and also acted as a member to decide the character and scope of the survey.

This survey was made by this Bureau, and reports were prepared upon the investigation of the nine private charities which are affiliated with the Greater Dayton Association as the Federation for Charity and Philanthropy. These agencies include the Humane Society, Day Nursery, Playgrounds and Gardens Association, Association for the Blind, Visiting Nurses' Association, Associated Charities, Relief Department of the Salvation Army, Tuberculosis Society and Milk Commission. As a result of these reports many constructive and instructive recommendations were put into effect by these agencies, and the confidential exchange was enlarged and its working made more effective.

An investigation was made of the Door of Hope, a charitable institution for delinquent girls, which is subsidized by the city government, and a detailed report was made to the city officials. As a result of this study certain improvements were made, the city government was given a voice in the management of the institution, and periodically receives reports from it.

*Distribution of the Tax Rate*

The findings of the county budget commission in August, 1915, in its work of determining the distribution of the tax rate for

1916, as between the city, county and schools, was closely followed by the Bureau, and prompted the publication in September of a widely-circulated pamphlet entitled, "Some Facts about the Tax Rate." This pamphlet, of sixteen pages, contained a general discussion of Ohio's complicated and unsatisfactory tax law, and an explanation of the methods of apportioning the tax rate, and by whom, and specifically pointed out the handicap suffered by Dayton through the absence of a law on the statute books giving home rule in matters of taxation.

Extensive tables giving the history of taxation in Dayton are now being prepared, in anticipation of the tax rate apportionment to be made in August, 1916, for the following year, and with a view to securing for each subdivision of the government its equitable proportion of tax revenues.

#### *Tuberculosis Sanitorium Site*

In co-operation with the Tuberculosis Society, a study was made of the need of a bi-county tuberculosis sanitorium, and of an available site for the hospital. A rating sheet for all the farms under consideration was devised and submitted to the bi-county board, with the result that within two months a question of several years' standing was settled, and a site was purchased.

#### *Budgets and Accounting Procedure for Various Organizations*

Reports were made to the Dayton branch of the Boy Scouts and to the Dayton Y. W. C. A. upon forms of budgets, classifications of accounting and books of account, which might be kept by these organizations.

#### *Civil Service*

At the request of the civil service board, the Bureau assisted in the examination of twenty-one candidates for the position of chief examiner of the board. The Bureau also corrected and graded the papers of the applicants. There was prepared a complete list of city employees, with titles and grades of pay, and these were catalogued according to the grades and classes established by civil service rules. Considerable work was done with the civil service board, both in outlining the general plan of activity of the board and upon the standardization of positions and salaries of the civil list. The standardization adopted in 1916 by the board is in accordance with the classification prepared by the Bureau.



### *Municipal Exhibit*

Under the auspices of the Bureau and under the direct charge of Mr. Mandel of the Bureau staff, the city, county and schools put on a municipal exhibit for ten days, October 9 to 18, 1915. The exhibit occupied the entire available space in Memorial Hall, a spacious, two-storied convention hall. There was portrayed by means of charts, physical displays, diagrams and actual demonstrations just how each of these political subdivisions is spending taxpayers' money. The entire cost of the exhibit was only \$1,500. It was attended by approximately 50,000 people, including more than 9,000 school children.

This exhibit was an effective presentation of social work and social needs, and had more than local significance. It offered to students of government from all over the country an excellent opportunity to judge critically the results of two years of a unique type of city administration. It gave to unfriendly critics of the new government the worst blow they had ever received, and let fair-minded persons know that Dayton is marching far ahead of most cities in the country.

One result of the exhibit was to assist in the passage, by a necessary two-thirds majority vote of the people, of a \$1,050,000 bond issue for public improvements.

### *Complaint Bureau*

Immediately preceding the installation of the new city government, many complaints were made in the public press relative to the operation of city departments. Investigation of a number of these criticisms led the Bureau to create a Complaint-Suggestion Division, where citizens might refer questions or suggestions about the city government. Many complaints were received, investigated and answered. In a large number of instances the cause of complaint was removed. In January, 1914, the city commission extended the functions of the garbage complaint station to include the registration of all city complaints. The Bureau has continued to maintain this function of its work, however, and many inquiries are addressed here.

### *Training School for Public Service*

During the summer vacation period of 1915, four university students spent their entire time with the Bureau, doing detailed work in the various departments, attending lectures, round-table

conferences, etc. Two of these men are now in Bureau work, and one is an assistant city manager.

*Publicity*

Since the institution of the Bureau in Dayton, much publicity has been obtained. This publicity includes thousands of copies of booklets and folders issued by the Bureau alone, and other matter appearing in magazines, journals and the daily press. All this has dealt with subjects of municipal administration—health, public safety, public welfare, finance, taxation, accounting, schools, and other public problems.

Among the various documents issued by the Bureau are:

- Organization of the Bureau of Municipal Research (Folder)
- Shall we Change our Form of Government? (16 pp.)
- Appropriation Ordinance; First Half of Year 1913 (30 pp.)
- Plan to Place the Waterworks on a Self-Sustaining Basis (28 pp.)
- Government by Deficit (3 Folders)
- Organization and Administration of the Department of Health (97 pp.)
- Reprint of the Dayton Charter (64 pp.)
- Health Bulletins (8 Folders)
- Appropriation Ordinance; Second Half of Year 1913 (30 pp.)
- Motor-Driven Fire Apparatus Bids (Folder)
- A Complaint Suggestion Bureau (Folder)
- The City Budget of 1914 (42 pp.)
- The City Manager Plan of Government for Dayton (8 pp.)
- A Charter Primer (24 pp.)
- Survey of Over-age and Progress in the Dayton Schools (46 pp.)
- Some Acid Tests of City Manager Government (Folder)
- Swat the Fly (Folder)
- Semi-Annual Report (16 pp.)
- Diphtheria Epidemics versus Diphtheria Prevention (Folder)
- Budget Classification (16 pp.)
- The City Budget of 1915 (52 pp.)
- Water Improvement Plans (8 pp.)
- Shade Trees in Dayton (Folder)
- Infant Death Rate (Folder)
- Second Over-Age and Progress Report
- One Year of City Management in Dayton (12 pp.)
- Some Types of City Government (12 pp.)
- Comment on the Dayton Charter (10 pp.)
- Some Facts about the Tax Rate (16 pp.)
- The Municipal Exhibit (Folder)
- Why the Bureau Should be Continued (Folder)
- Reprint of the Annual Report of the City Commission for 1915 (36 pp.)
- Reprint Budget Making for Small Cities (14 pp.)
- Reprint Budgetary Procedure under the Manager Form of City Government (14 pp.)
- Reprint The Law and Public Welfare (8 pp.)
- Reprint The City Manager and the Baby (Folder)
- Reprint The City Manager and Social Justice (8 pp.)
- Reprint The City Manager at Work (8 pp.)
- The City Budget of 1916 (64 pp.)

In addition special articles were contributed to nearly a dozen magazines. The Bureau placed in Dayton papers several full-

page advertisements relating to the efficient work and plans of the city's public servants. Abundant publicity has been gained locally concerning the activities and accomplishments of city officials. It is doubtful if any city, approximating the size of Dayton, in the whole country has received nearly as much favorable notice through newspapers and journals.

#### *Education*

In accordance with the desires of the trustees of the Bureau, much money and time have been spent in stimulating the interest of city officials and others in civic matters, particularly through attendance upon conferences and addresses given in other cities. This also includes addresses given by members of the Bureau in other places.

In this connection, the Director of the Bureau, Dr. D. F. Garland, Miss Dilks, Dr. Paul Tyner, City Engineer Gaylord Cummin, City Clerk W. G. Lee, Dr. L. D. Upson, A. M. Mandel, Miss Electra Doren, city librarian, C. O. Dustin, Winton L. Miller, Dr. Harold E. Egan, chief food inspector of the division of health, newspapermen and others have made trips away from Dayton. They have attended the Cincinnati Municipal Exhibit, meetings of the American Political Science Association, a conference on Standardization of Municipal Specifications, meetings of the Ohio Municipal League, American Library Association meeting, the New York Training School for Public Service, National Pure Milk Show, the National Conference of Charity and Correction, and many other gatherings.

Lectures were given by members of the staff in Columbus, Niagara Falls, East Dorset, Vt., Amsterdam and Cohoes, N. Y., Norfolk, Va., Indianapolis and Richmond, Ind., Portland, Me., Cincinnati, Springfield, O., Racine, Wis., Toledo, Ironton, Sandusky, and elsewhere, as well as addresses before several annual conferences of various political and educational societies.

The Bureau has entertained deputations of business men and officials from a large number of cities, and representatives from universities, libraries, etc.

Extensive correspondence has been carried on with city officials, civic associations and residents of other cities who were interested in Bureau, the commission-manager form of government, and various phases of municipal administration.

*Schools*

In order to stimulate interest in progressive school methods, a number of publications relating to school matters were distributed during 1913 and 1914. The Bureau, in co-operation with the then Superintendent Mr. E. J. Brown, made a study on over-age, non-promotion, retardation and elimination. These data were collected on special blanks furnished to each school teacher. The tabulations occupied considerable time, during which it was also possible to make an investigation of school buildings, business methods, relative costs and hand-writing. The report was submitted to, and approved by, Dr. H. L. Brittain, director of the Ohio School Survey Commission. It was also submitted to Superintendent Brown and several members of the board of education. Deep interest was expressed in the results, and it is believed the formation of over-age classes, as well as the appointment of a visiting nurse, was in no small measure due to this study.

A second study on over-age and progress was made and a report submitted to Superintendent Brown. In May, 1914, a conference was held with the superintendent, medical inspector, health officer and Bureau representatives, with a view to increasing co-operation between the health division of the city and school system, particularly with a view to further preventing the spread of contagious diseases.

The Bureau is now contemplating an inquiry into the organization and administration of the board of education, and to this end two sets of questions have been formally presented to that body. This inquiry will assume definite form with the addition to the Bureau staff, at an early date, of a school investigator.

## OUTSIDE CITY SURVEYS

*Oakwood Village*

An investigation was made of the condition of paving and sewers in Oakwood Village, adjoining Dayton. In connection with a general study of conditions in the village, the recommendation was made that the manager form of government be adopted.

Calculations for two bond issues for improving and enlarging the school activities of the village were made, and arguments prepared to be used in the campaign for the passage of these bond issues at election time.

*Survey of Jackson, Michigan, Safety Department*

Early in 1916, Mr. Mandel made for the Bureau a survey of the police and fire departments of Jackson, Michigan. This report was submitted, with constructive recommendations, to City Manager Gaylord C. Cummin, who is gradually introducing the suggestions into his departments.

*Survey of Denver, Colorado, Social Agencies*

Early in 1916, a detailed investigation was made by a member of the Bureau staff, under the supervision of Dr. W. H. Allen, of the Institute for Public Service in New York City, of the twenty-one social agencies affiliated as the Denver Federation for Charity and Philanthropy. The Federation recognized the helpful possibilities to be derived from the adoption of the recommendations contained in the report upon the survey, and the various institutions pledged themselves to carry out the plans and recommendations as rapidly as possible.

STATE MATTERS

*State Budget*

For several months in 1913, at the request of Governor James M. Cox, the director of the Bureau was loaned to the state to work in co-operation with Director S. Gale Lowrie, of the legislative reference library, the state auditor and other officials, upon a program for the state budget. After several weeks' study, a report was submitted in the form of four bills, covering the budgetary procedure. All of these, save the Mooney "Fee Bill," were passed, and a budget commissioner was appointed by the governor. A special session of the legislature passed the budget as prepared by the commissioner, making Ohio the first of the states adopting financial control through a budget program.

*State Schools*

In December, 1912, the director of the Bureau and Dr. D. F. Garland, the president, called the attention of the governor to the desirability of a complete examination of rural schools of the state. The governor, impressed with the school survey of Wisconsin, requested the Bureau to secure Mr. A. N. Farmer of the New York Training School for Public Service, for further discussion. After a conference participated in by Governor Cox, Mr. Farmer, Dr. S. Gale Lowrie, Speaker Swain and the director

of the Dayton Bureau, a bill providing for a rural school survey was drawn. The director of the Bureau spent a number of weeks in Columbus working for the passage of this act. Dr. W. H. Allen telegraphed that this was the "greatest educational chance," and expressed the interest which was manifested by President Pritchett, of the Carnegie Foundation. Dr. H. L. Brittain, then of the Training School for Public Service, directed this survey. As a result of the survey there was enacted a complete revision of the rural school laws, and today the state of Ohio stands first in her system of rural education, instead of forty-fifth.

#### *State Social Work*

In December, 1912, the director of the Bureau attended a meeting of social workers at Columbus, to urge upon the governor the earnest consideration of the codification of penal, charity and health laws of the state. Provision was made to maintain a lobby which would direct public attention to the needs of the legislation recommended by the codifying commission.

In October, 1913, at a meeting in Columbus of state social workers there was organized the Ohio Child Welfare League, for the promotion of legislation relating to juveniles. The Director of the Bureau was made treasurer of the organization.

In July, 1914, the director of the Bureau attended a meeting of persons interested in civil service, at Columbus, and was made a member of the executive committee of the State Civil Service League, established at that time.

#### *Civil Service and Taxation*

The director of the Bureau, being a member of the Ohio Municipal League and the Ohio State Civil Service League, has attended the several meetings of these organizations, and participated in discussions upon the Ohio tax situation, the need for increased revenues by cities and the improvement of the civil service. A health survey for the state was outlined and submitted to the State Board of Health at Columbus, late in 1915. No further action has resulted since that date, however.

## CHAPTER V

### THE OHIO INSTITUTE FOR PUBLIC EFFICIENCY

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#### *How It Began*

Four months before Mr. R. Fulton Cutting's statement published in the *New York Times* in September, 1913, to the effect that every state needs a bureau of municipal research, no matter who is governor, the Ohio Institute for Public Efficiency was incorporated, although it did not begin actual operation until some months later. The Institute grew out of certain concrete experiences of the Cincinnati Bureau of Municipal Research, of which one or two examples may be given.

Confronted early with the necessity of dealing with highly technical questions relating to paving specifications, the Cincinnati Bureau was compelled for that purpose to add an engineer to its permanent staff. When these questions had been settled, however, the center of attention was shifted to certain social welfare questions, with which the engineer was quite unfamiliar. It was a mere accident that approximately at that juncture the engineer's services were urgently demanded in another position and the Bureau was enabled to add the needed social welfare man to its staff. Otherwise the Bureau, being limited in resources, might have felt itself obliged to release the engineer in order to meet the changed conditions.

It can readily be seen that if a local Bureau is forced to turn efficient staff members adrift as soon as the most pressing need for their services is past, it will hardly be in a position to secure high grade technical service at all.

#### *Theory of Organization*

The Ohio Institute was established with the following considerations prominently in the minds of its organizers:

1. Public affairs present a wide range of technical questions which cannot be successfully handled without corresponding technical knowledge and experience; i.e., accounting, engineering,

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<sup>1</sup>Prepared for MUNICIPAL RESEARCH by Mr. R. E. Miles, Director of the Ohio Institute for Public Efficiency.

social welfare, education, health, etc. Such questions are often so interwoven in a single situation that several kinds of technical service are required in combination.

For example, it is the frequent experience of those proposing constructive plans in public health or social welfare to encounter the objection that "there is no money." It often requires a thorough accounting analysis to determine how far the objection is really valid. Or again, the accountant inquiring into the justification for street repairs, for example, may need the help of the engineer.

Now, no matter what may be true of New York and other cities of the first rank, it is evident that few cities of a half million or less population will find it feasible to maintain a bureau of municipal research, or similar organization, equipped with a permanent and complete technical staff. Yet without such technical service readily available, a local bureau may at any time find itself practically helpless before a serious public problem which it is directly the bureau's function to deal with.

If, then, in most cases, a single city cannot support the necessary technical staff, what is the unit that can?

2. The state is the most logical unit for a well-rounded public efficiency organization because—

a. It includes a number of cities (Ohio has twenty-three of over 20,000) which jointly will be much better able than one alone to support the necessary technical staff.

b. From a centrally located technical staff, local civic organizations can obtain at any time such technical service as they need, without being obliged to carry it continuously, while on the other hand the state is not so large a geographical unit as to prevent a central staff from keeping in reasonably close touch with local conditions and problems.

c. Many local problems cannot be solved by local effort alone, being contingent upon state legislation or administration. Even for so trivial a matter as fixing the salary of some minor employe, cities are not infrequently compelled to resort to the legislature. On questions of large importance, like the adequate care of the feeble-minded, which is clearly a responsibility of the state government, the more progressive local communities must continue without the needed provisions until they can convince a controlling majority of the state. A state organization can greatly facilitate this process.

d. State policies, on the other hand, may vitally affect local



conditions. Laws on taxation, elections, regulation of liquor traffic, regulation of public utilities, etc., as well as the mode of their administration, are of direct and intimate concern to local communities, but can hardly be dealt with successfully by the individual locality.

e. Underlying constitutional and statutory conditions are uniform throughout the state, thus creating a legal unity in its public affairs. The study of these conditions as a whole makes for economy and for similarity and consequent comparability of practice and standards.

f. The state government as well as local communities can benefit from constructive efforts to improve its efficiency. Being in less direct contact with its constituency, it is perhaps even more in need of such efforts.

3. Inasmuch as public service is sometimes performed by governmental agencies, sometimes by privately supported agencies, sometimes by both, in co-operation or duplication, attention should not be limited to governmental agencies in the effort to secure constructive improvement.

4. The increasing complexity of public affairs requires a correspondingly greater specialization in the methods of developing an intelligent public opinion, without which popular government cannot succeed. An institution whose purpose is the unbiased and systematic education of public opinion on public affairs is exercising as important and necessary a function as a university. To obtain and spread accurate and uncolored information on a disputed public question is of no less consequence than the instruction outlined in a college curriculum.

5. If, as President Lowell says, the first necessity of popular government is to learn to use experts, experts must be prepared to be used.

#### *Purposes of the Institute*

The Ohio Institute for Public Efficiency was therefore organized as a corporation not for profit, with the following stated purposes:

"Advancing the public welfare, especially (1) by promoting the efficiency and adequacy of government, through the ascertainment and application of scientific standards and principles, and otherwise; (2) by continually and systematically informing public opinion upon public affairs; (3) by promoting the co-operation, co-ordination, and efficiency of civic, social, and charitable organizations; (4) by

educating persons in the theory and practice of public efficiency and preparing them for efficient public service; and by any other means that may be deemed necessary and proper."

The same ideas have been restated in the more popular terms following:

*Object*

To make Ohio a leader in constructive social work and civic progress.

*Method*

By making all public departments and institutions as nearly as possible 100 per cent efficient.

*Means Employed*

1. Expert knowledge of best methods and practice in this country and abroad.
2. Thorough examination by experts of each department and institution.
3. Constructive plans for improvement recommended to proper officials.
4. Securing actual adoption and installation of recommendations.
5. Training and furnishing experts for public service.
6. Continuous and systematic education of public opinion to understand and demand increasingly higher standards of public service.

*Support*

Work done for state administration and legislation supported by contributions of public-spirited citizens and organizations.

Work done for counties, municipalities, and school districts paid for by local authorities, organizations, or individuals.

*Advantages*

An independent non-political organization—

1. Endeavoring to promote the welfare of the whole community, and not representing any special interest.
2. *In operation permanently*—no matter how officials and administrations may come and go.
3. *At work continuously*—not "out of town" or tied up in business affairs when important public questions are being decided.
4. *Securing actual results*—not stopping with proposing attractive plans, but *following up* recommendations till *something is done*.
5. Bringing about conditions in public service which put a premium on efficiency, thus enabling and inducing better men to enter and retain public office.
6. Discovering and applying new standards of efficiency.
7. Rendering service and information at *minimum cost* through centralization.
8. *Unceasingly stimulating and educating public opinion*.

*Undertakings of the Institute*

Since the Institute officially began work in January, 1914, its services have been employed by:

The Civic League of Cleveland.

The Cleveland Federation for Charity and Philanthropy.

The Cleveland Associated Charities.

The Toledo Commerce Club.  
The Columbus Chamber of Commerce.  
The Columbus Bureau of Municipal Research.  
The Cincinnati Bureau of Municipal Research.  
The Marion Township Manufacturers' Association.  
The Akron Bureau of Municipal Research.

Among the more important items of work done by the Institute, either under engagement for local civic and social organizations or otherwise, may be mentioned:

A study of county accounting methods was made for the Civic League of Cleveland and with the co-operation of the County Auditor and Treasurer. Recommendations for an improved system were formulated and presented and now await official action.

An analysis of financial conditions and a review of general organization and methods of the Cleveland Associated Charities were made for the Cleveland Federation for Charity and Philanthropy and for the Associated Charities itself. Recommendations relating to accounting and reporting methods were approved and adopted.

An improved general municipal accounting system was outlined for Akron, Columbus, and Toledo. Based on this outline, a procedure using recent labor-saving devices was installed by the Institute in Akron at the desire of the city auditor and on behalf of the Akron Bureau of Municipal Research. A longhand procedure worked out by the state bureau of accounting was installed by it in Columbus and Toledo. Thus were added three more cities to the previous four in Ohio which could claim to possess adequate general accounting systems.

New budget estimate methods were prepared for Columbus and Toledo, which were substantially adopted.

Extensive co-operation was afforded to the state bureau of accounting in the preparation of a new standardized classification of expenditures, adapted for use by state departments, cities, counties, school districts, and townships. This classification marks a definite advance in its clear distinctions between expenditures for current operation, for maintenance (upkeep), and for outlay on additional assets. Its elasticity enables it to be condensed or expanded according to need. The classification is now in use in three cities and one school district and is to be promulgated for all Ohio cities.

The principal features of centralized purchasing procedure were outlined and submitted to the new central purchasing departments created by charter in Columbus and Toledo.

An analysis of the financial condition of the city of Toledo was prepared for and published by the Toledo Commerce Club as a matter of public information.

A similar, but briefer, analysis for Columbus was published by the Columbus Bureau of Municipal Research.

A recommendation for a more definite policy in municipal electric light plant expenditures in Columbus was supported by the Chamber of Commerce and acted upon favorably by the city council.

A study of certain phases of public school policy was made for the Columbus Chamber of Commerce.

Extended city charter studies were made for the Cincinnati Bureau of Municipal Research.

An analysis was made for the Marion Township Manufacturers' Association of the causes for the marked increase in tax rate in that township.

With the cordial co-operation of the state librarian and his staff, a study of the functions, organization, and procedure of the state library was made and submitted. Its recommendations are now under consideration.

A clearing house was organized for information in current civic and social activities in Ohio.

A member of the Institute's staff is assigned to serve continuously as secretary of the committee on public efficiency and economy of the Toledo Commerce Club.

It will be seen that the work has been of a constructive character, designed to promote progress and increase efficiency wherever opportunity offered.

Largely, no doubt, because the work has been done in this spirit, a gratifying co-operation has been met with on the part of most public officials, and a number of our recommendations have been approved and acted upon.

#### *Department of Social Service*

For some time past, social workers in Ohio have felt that their efforts would be much more effective if systematically co-ordinated through some central agency. They have encountered many problems which could be dealt with in a thorough and successful way only through co-operation with other social

workers in the state as a whole. No regular method of organizing such co-operation has hitherto existed.

This feeling led to the request by prominent social workers that the Ohio Institute establish a department of social welfare contemplating especially:

1. The promotion of scientific principles of welfare activity.
2. The advancement of efficient organization and administration of public and private social welfare agencies.
3. The discussion of proposed legislation and urging of approved measures.

Active work began in July, 1916. An advisory council of representative social workers has been created to facilitate interchange of opinion and to ensure thoroughgoing consideration of all aspects of difficult problems.

If carried out as planned, the new department will combine the efforts which in other states, when established at all, are carried on separately, in the form of state charities aid associations, child welfare leagues, mental hygiene societies, etc. It is believed that the new form of organization will exhibit important advantages, notably in getting better team work, and commanding a greater variety of technical service.

#### *Program of Social Service Department*

While final determination of the specific enterprises to be undertaken by the new department, as well as their order and method, is impracticable at this writing, the following suggestions already received will serve to indicate the lines along which the work will probably be developed:

1. Organization in co-operation with public officials of a state program for the preventive control of feeble-mindedness.
2. Survey of governmental outdoor relief agencies as suggested by the survey committee of the Cleveland Foundation, and reorganization of county social welfare activities.
3. Formulation and promotion of such legislative measures as may be deemed advisable.
4. Promotion of efficient social welfare organization in local communities throughout the state, including community surveys when such can be helpful.

5. Development of the community planning idea in the social field.
6. Co-operation with the state board of administration, board of state charities, state industrial commission, and other welfare departments of the state government.
7. Especial attention to measures relating to child welfare.
8. Establishment of working relations with colleges and universities.
9. Maintenance of a clearing house of information on social activities, institutional organization and management, etc.
10. Development of constructive publicity in social service.

*State Lacks Adequate Accounting Methods*

In other lines, the opportunity and need for constructive effort is no less. Upwards of \$125,000,000 a year is expended for governmental purposes in the state of Ohio. Yet the state government itself, as is candidly pointed out by the state auditor, is without adequate accounting methods, and all but a few of its subdivisions are similarly lacking. In one city which the Institute had occasion to study, nobody, either official or unofficial, was able to approximate the accumulating deficit within several hundred thousand dollars. Arguments occur between successive administrations as to the financial conditions for which each is responsible, when such questions would be instantly settled by reference to proper balance sheets, if there were any.

A few years ago, the Ohio state school survey found that of the eighty-eight reports received from county auditors relating to school finances, only thirty-three carried forward proper balances, the other fifty-five exhibiting discrepancies varying from \$35,790.91 in one direction to \$99,738.88 in the other.

How can financial policies be guided or efficiency known when accurate knowledge of facts is lacking? A thoroughgoing installation of modern methods in accounting is an indispensable preliminary to a proper understanding and management of public finances. Until this has been done, discussions such as that on the financial straits of cities are based in considerable degree on guesswork.

Contracts amounting to several millions of dollars a year are now being let for highway improvements. To co-operate in the most economical planning, efficient construction, and systematic maintenance of these highways would be a valuable service.

*Educational Problems in Ohio*

Over \$30,000,000 a year is disbursed in Ohio from the public treasury in support of public educational activities, the total value of school property being stated at approximately \$90,000,000.

There are in Ohio over 900,000 children between the ages of six and sixteen years, and over 325,000 more between sixteen and twenty-one, making a total of a million and a quarter youth of school age.

The vast majority of children do not go beyond the elementary schools, and many fail to complete even the elementary course. Recent studies indicate that fully 50 per cent of the children in city elementary schools are older than they should be for the grades they are in. Legislation governing the rural schools of Ohio has recently been much improved, but much remains to be done to carry the new legislation into effective operation.

Antiquated methods of instruction still prevail in many schools, in large measure due to ignorance and inertia. Properly applied information and stimulus could readily increase their efficiency by several hundred per cent.

It is not too much to say that through the establishment of a properly handled school service bureau, continuously co-operating with school officials and teachers, the public schools of the state would be enabled not only to increase their own efficiency vastly, but to do much for the rest of the country.

"The greatest *business* problem today," declared Dr. Ernest Fox Nichols before the National Chamber of Commerce, "is the *human* problem of labor and the wise handling of men." "Industry," says a bulletin of the Immigration Committee of the same body, "is now assuming the risks of *citizenship*, as well as those of physical and efficiency conditions. . . . The most practical Americanization work in the country is being done by organized industries."

In other words, the industrial, the social, and the educational are all bound up together, and to all of them an efficient public service, closely co-ordinating with private activities, is vitally essential. It is toward this end that the Ohio Institute for Public Efficiency is directing its efforts.

As this article began with a reference to Mr. Cutting, it may well end with a quotation from him:

"The kind of information upon which honest executives and legislators can depend must come, if it comes at all, from independent sources. The private citizen agency is wholly free

to supply the public with knowledge, and the courageous, intelligible, and dispassionate dissemination of accurate information is the best way to help the electorate to substitute brains for sentiment in choosing their legislators and administrators.

"I believe this [the establishment of a 'state administrative research bureau'] to be one of the most useful services which public-spirited men could do their State at this particular time."



## CHAPTER VI

### THE MILWAUKEE CITIZENS' BUREAU OF MUNICIPAL EFFICIENCY<sup>1</sup>

#### *Circumstances Leading up to the Formation of the Bureau*

Milwaukee is fortunate in having many civic organizations interested in its progress and welfare. According to a report issued by the City Club, in which the history of the research movement is given, a number of civic organizations, impelled by the success of the New York Bureau of Municipal Research, took the initiative in forming a joint committee to consider the question of organizing such a bureau in Milwaukee.

In April, 1910, the Social Democratic Party came into power. The leaders of this party adopted the program of municipal research in June, 1910, and organized the bureau of economy and efficiency as an integral part of the city government. The work of this organization was of such a character that the retention of the bureau, as a part of the city government, became a political issue. So strongly entrenched, however, was the idea of municipal research that the new administration, which came into office in April, 1912, was pledged either to retain the old bureau or organize a new one. As a result an ordinance was passed in September, 1912, creating a bureau of municipal research. The appointment of a director was delayed to such a length that the movement seemed about to be lost.

#### *Organizing and Getting under Way*

The City Club, at this point, arranged to have Dr. W. H. Allen, Director of the New York Bureau of Municipal Research, address the club and its guests. On November 7, 1912, Dr. Allen addressed the club on "Progress of Efficiency in Public Business." This address so aroused the enthusiasm of the club that the matter of organizing a citizens' bureau was considered, but owing to the difficulties attendant upon financing such a proposition, the City Club decided not to undertake the plan.

<sup>1</sup> Prepared for MUNICIPAL RESEARCH by Mr. John F. Putnam, Director, The Milwaukee Citizens' Bureau of Municipal Efficiency.

A citizens' committee, consisting of C. Nesbitt Duffy, Albert Friedmann and Walter Stern, was then formed for the purpose of taking the first steps toward the establishment of a citizens' bureau. The New York Bureau of Municipal Research was engaged for the purpose of making a preliminary survey of the several departments of the city government.

In April, 1912, Henry Bruère, Director of the New York Bureau of Municipal Research, assisted by members of the New York Bureau's staff, made the survey. At the close of the survey, Mr. Bruère addressed a dinner of one hundred or more of the prominent citizens upon the findings of the survey. The committee then undertook to raise a sum of \$10,000.00 per year for a period of three years, which was done by securing twenty subscribers for \$500.00 each.

The Citizens' Bureau of Municipal Efficiency was incorporated the 27th of May, 1913. Thomas L. Hinckley, of the Training School for Public Service, began his duties as director December 1, 1913.

#### WORK UNDERTAKEN AND CONSTRUCTIVE RESULTS ACCOMPLISHED

##### *General Summary*

The Citizens' Bureau has now been working two and a half years on a co-operative basis with city departments. The Bureau has furnished the assistance of its staff to the comptroller, the bureau of bridges and buildings, the bureau of sewers and city service and the bureau of purchases and stores; it has made surveys of the department of public works, the purchasing department, the fire department, the asphalt paving situation, a preliminary survey of school buildings and building sites, the street lighting question, and has made a preliminary report on city finance; it has advised with various department heads and officials, relative to the perfecting of budget making methods, the control of the common council contingent fund, the control of the transfer of budget appropriations, the perfecting of methods of levying and billing taxes and special assessments, and the improvement of office procedure and methods; it has publicly advocated measures which, in its opinion, would be beneficial for the city, such as the ward reorganization proposed by the City bureau of municipal research.

*Installations, Surveys, Special Assistance to City Officers*

During the year 1913, the deputy comptroller, Albert P. Puelicher, had designed and installed the present system of proprietary accounts in the comptroller's office. An appropriation accounting system was also designed. The Citizens' Bureau offered to assist the comptroller in the installation of this system and the offer was accepted. Because of control over appropriations furnished by this system, overdrafts of funds have been entirely eliminated and daily appropriation balances made available for the information of departments.

The comptroller's office has perfected its office methods and procedure, and improved the personnel of its office during the past two years. The office is now the unquestioned leader in all matters pertaining to city finance and financial legislation.

The Citizens' Bureau, with the approval of the comptroller's office, employed H. N. E. Gleason, of the New York Bureau of Municipal Research, to design a uniform cost system for the department of public works. This system has now been installed by the Bureau's staff in the bureau of bridges and buildings and the bureau of sewers. These bureaus are now in a position to keep close control over their service costs and the use of materials and supplies. Such a system was especially needed by the bureau of sewers, where there was practically no system of accounts and consequently little control over the large amounts of material used by that bureau.

Members of the Citizens' Bureau's staff have furnished assistance to the bureau of purchases and stores to assist in speeding up that organization. The Citizens' Bureau has under way a plan for the reorganization of the city purchasing division.

The Citizens' Bureau assisted in installing a system of payroll control for the city service. It also aided in financing the employment of civil service experts to revise the rules and methods of the city service commission.

A survey of the department of public works was made by W. B. Holton, Jr., of the New York Bureau of Municipal Research, for the Citizens' Bureau. As a result, a uniform system of cost accounting is being installed in the entire department, and an entire reorganization of the city's purchasing methods is taking place. The comptroller's office has taken up the question of financing special assessments, and has obtained the passage of a law permitting the issue of six-year serial street improvement bonds, redeemable out of funds collected by special assess-

ments for such improvements. This does away with the issuing of street improvement certificates, and as a result more favorable prices are obtained from contractors. Plans are now under way to introduce legislation at the next meeting of the legislature, abolishing the sprinkling, flushing and other special assessments.

A survey was made of the fire department's business methods and its repair shop. As a direct result, the City's bureau of municipal research has been requested to make a study and report upon the motorization of the department and the consolidation of the repair shops of the city departments.

At the instance of the Citizens' Bureau, a study of Milwaukee's asphalt pavements was made, and a pavement map of the city prepared by Prof. L. S. Smith of the University of Wisconsin. A training school for pavement inspectors was organized and much helpful information collected for the bureau of street construction.

The Citizens' Bureau, on request of the school board, conducted a survey of Milwaukee's school buildings. As a result a building program has been outlined for the school board by Hornell Hart, executive secretary of the City Club.

Milwaukee's street lighting has been in a deplorable condition for some years. The city engaged expert engineering service to make a report upon the situation. This report caused much comment and contention in both citizen and public utility circles. In order to present all sides of the controversy, the Citizens' Bureau made a résumé and compilation of all available matter relating to the question.

In addition to the above, the Citizens' Bureau made an inspection and report on the Greenfield Sanitarium, a county institution (this institution has since been taken over by the city) and a report on office methods of the Associated Charities. The Citizens' Bureau also worked with the Citizens' Committee of One Hundred to better the condition of the city and county hospitals and to improve and extend hospital facilities.

#### *Budget and Finance*

In 1913, the mayor appointed a citizen committee to study the problem of framing a financial program for Milwaukee. This committee requested the Citizens' Bureau to undertake the direction of this work. The Citizens' Bureau engaged Prof. Jeremiah Jenks, of the Alexander Hamilton Business Institute, to make a preliminary study and report. This report was submitted to the mayor and members of the commission.

The comptroller has been active in perfecting the segregated budget since its introduction. The expense classification has been improved; the control over inventories extended, the budget form simplified, the plan of considering departmental requests by a committee of the board of estimates before submitting the final budget to the board, introduced. The Citizens' Bureau has been called into frequent conferences by the comptroller in regard to these questions.

The board of estimates at the instance of the Citizens' Bureau has established regulations regarding the transfer of budget appropriations during the year, so that transfers have been reduced to a minimum. The board has also provided that a tentative budget be published at least two weeks previous to the date of the final passage of the budget and provided a public hearing for the same.

The Citizens' Bureau analyzed the expenditures made from the common council contingent fund in 1914, and suggested that the common council adopt the plan of allowing transfers from this fund only in emergencies. As a result, the expenditures of \$49,409.33 from a \$50,000.00 fund in 1914 were reduced to \$23,875.11 in 1915.

The tax commissioner has effected a partial consolidation of the functions of his department by having the work of making the tax roll transferred to his department from the city clerk's office. The Citizens' Bureau was in a position to collect much data for him relative to such work.

#### *The Central Purchasing Problem*

Milwaukee's city government has been wrestling for years with the problem of efficient city purchasing. When the Citizens' Bureau took up the "efficiency man's" burden, the purchasing situation might be summed up as follows:

1. Fifty per cent of the supplies, materials and equipment were bought for eight absolutely independent boards and commissions by a dozen buyers.

2. The general city government, including the remaining departments, nominally bought through a bureau of purchases, but actually the departments did most of the buying, while the bureau acted as a "rubber stamp."

At the time, almost no standards existed for buying anything. Two coal specifications,—one for fire hose, and a few for road

materials were all that were in use. It was hard to see on what basis centralized buying could be placed, even if advocated.

It was decided to heed the warning of previous studies of the purchasing question and begin at the very bottom to standardize the commodities used and the manner of buying them. With the co-operation of various city officials and the city testing laboratories, this program was undertaken, a standard method adopted, and during the first eighteen months considerable progress made, including:

1. The drafting of 1200 standard specifications,
2. The adoption of a trade classification of city's supplies,
3. Much valuable data as to service and trade conditions in Milwaukee.

With this concrete material, the problem was to frame a plan of organization and procedure that would combine the administrative boards and city departments and to convince the mayor and his advisers of the feasibility of the plan. It will require legislation to carry out the ultimate plan of a central supply department, but for the present a central purchasing committee has been formed, consisting of the mayor, commissioner of public works, secretary of the school board, public librarian, director of the museum, and secretary of the park board. A member of the staff of the Citizens' Bureau has been appointed executive secretary to the central committee.

The committee has already let contracts for the purchase of coal for the following year, and schedules are ready for the purchase of soaps, materials of construction and office supplies. A saving of nearly \$20,000.00 was effected on the purchase of coal alone.

#### PRESENT PROGRAM AND OUTLOOK FOR THE FUTURE

The Citizens' Bureau is now engaged in:

Installing a cost system in the bureau of street sanitation.

Reorganizing the bureau of purchases and supplies and establishing a central purchasing committee for all departments. This will include the further working out of standard specifications; development of contract procedure in purchasing materials and supplies; development of a testing and inspection division.

Completing the study on the plan for financing public improvements, the Citizens' Bureau has now collected and is tabulating

material upon rates and kinds of revenue levied and collected by the various American cities.

Investigating the cost of public printing in Milwaukee and the feasibility of the city's issuing a municipal bulletin;—the municipal reference library is collaborating in this work.

The accounting system designed for the fire department has been approved by the comptroller and it is expected will be installed by the Bureau in the near future.

Plans have been laid for the Citizens' Bureau to complete the installation of cost accounting in all bureaus of the department of public works; to collaborate with the comptroller in developing a complete uniform system of accounts for all departments of the city government; to study the practicability of consolidating the making of pay-rolls; to investigate the use of mechanical devices for budget accounting and statistical work; and to make studies of the present departmental organizations with a view to consolidating or simplifying them.

#### OFFICIAL RECOGNITION OF BUREAU ACHIEVEMENTS

The following letters have been received from city officials relative to the Bureau's co-operative work in the city government:

May 27, 1916.

CITIZENS' BUREAU OF MUNICIPAL EFFICIENCY, MILWAUKEE, WIS.

Dear Sirs:—

Regarding work which you have done in this Bureau, I beg the privilege of making the following brief report:

The latter part of the year 1914, your Bureau took up with me the proposition of installing a complete cost accounting system in this Bureau. I, at that time, had what might be called a partial cost accounting system, which was not satisfactory either from my view-point as an executive and an engineer, nor was it a satisfactory system from the accountant's view-point. It was, therefore, agreed with the Commissioner of Public Works, that a system devised by your Bureau would be installed providing it was approved by the Comptroller's Office and by the executive in charge of the Bureau.

Your Bureau, therefore, put men at work and very carefully analyzed such records as I had, and also analyzed very carefully all the activities of this Bureau. A great deal of time was spent at this in consultation with me, as well as outside of this office, the result being that in the fore part of 1915, a complete cost accounting system was drawn up and in a conference in my office with the Deputy Comptroller and with a representative of your Bureau, the entire system was gone over, was approved by the Deputy Comptroller from the accounting standpoint and was approved by me as enabling me to obtain readily and periodically, the actual cost of any operation which this Bureau might at any time undertake. The system was, therefore, approved by the Commissioner of Public Works and I believe in the month of March, 1915, was installed in this Bureau.

Regarding the operation of this system I wish to say that in my opinion, based on the experience of 1915, it will, in every respect, come up to

MILWAUKEE CITIZENS' BUREAU

expectations. It provides me with data by means of which I can keep a very accurate check on all work being done by this Bureau. The data are in such shape that I can differentiate the cost of any operation to as fine a degree as I may see fit, and on the other hand it provides me monthly with summaries of the costs of various operations in a concise, and by no means cumbersome form.

Looking towards the future, I can say that I believe that this system of cost accounting would prove invaluable in the line of furnishing concise and accurate information regarding comparative costs from year to year, of like operations; and it is needless to say that any system which will provide these comparative costs will furnish the executive with information by means of which he will, at all times, be enabled to detect any costs which are higher than they should be. It will also enable him by being able to differentiate these costs and other various parts wherein the cost of any operation may possibly be reduced. This, in my opinion, is the all important function of any cost accounting system, and I can say very emphatically that from the experience we have had with this system, though it is brief, that it will result in furnishing this Bureau with data by which the executive will be in a position to operate the same much more efficiently than has been possible in the past.

I am very highly pleased with the cost accounting system established in this Bureau and would say, in conclusion, that my hopes and expectations for the same are very high indeed. In installing the system, this office has been guided entirely by the advice and help from your Bureau and we have not endeavored to make any changes whatsoever without taking the same up with the representatives of your Bureau, who are responsible for its design and installation.

Yours very truly,

(Signed) J. C. PINNEY, Jr.,

SUPERINTENDENT, BRIDGE & PUBLIC BLDGS.

May 29th, 1916.

MR. ERICH C. STERN, PRESIDENT,  
MILWAUKEE CITIZENS' BUREAU OF MUNICIPAL EFFICIENCY,

Dear Sir:—

The services rendered to the City of Milwaukee by the Milwaukee Citizens' Bureau of Municipal Efficiency have proved to be very valuable. I cannot cover the complete scope of the work done by the Bureau, but I can testify to that portion with which my office has contact. Beginning with the year nineteen hundred and fourteen, this office was confronted with the control of expenditures to be made according to the first real segregated budget adopted by the Common Council of Milwaukee. An appropriation accounting system had been drafted by the Deputy Comptroller, but it was impossible to install it and at the same time, keep up the current work with the limited force at my command. The trustees of the Milwaukee Citizens' Bureau of Municipal Efficiency kindly placed a portion of their staff at my disposal for this work.

Their staff was headed by a competent accountant, which enabled me to give them complete charge of the installation. The work was very satisfactory. The installation of this accounting system has given the Comptroller complete control of finances and no illegal payments or over-drafts of appropriations have since been possible.

The bureau has also been consulted on numerous occasions and gave advice on matters relating to budget forms and procedure and to adapting the business methods of the city to appropriation control.

At my request and with the consent of the Commissioner of Public Works, the staff of the bureau has installed cost accounting systems in several of the bureaus of the Department of Public Works. These cost accounting systems are proving very valuable for the operating officials. It is now possible to immediately discover abnormalities in costs, to place



**CITIZEN AGENCIES FOR RESEARCH IN GOVERNMENT**

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the responsibility therefor and apply corrective measures. The bureau is installing such cost systems in every operating department of the city.

The bureau has also done a great deal of work towards the centralization of city purchasing. Although certain charter changes are necessary before a department can be established for this purpose, through the efforts of the bureau, an organization of the purchasing officials of the city was effected and the several departments can now syndicate their purchases at least for the larger things.

There is no question in the minds of those acquainted with the work of the Milwaukee Citizens' Bureau of Municipal Efficiency, that the bureau has been an important factor in assisting the several department heads to establish improved accounting and business methods, which it would have otherwise been impossible to realize because of lack of funds and time.

It is hardly necessary to state that I appreciate the benefit to the city of the co-operative work done by the bureau.

Very respectfully,

(Signed) **LOUIS M. KOTECKI,**  
**COMPTROLLER.**

May 29, 1916.

**MILWAUKEE CITIZENS' BUREAU OF MUNICIPAL EFFICIENCY,**  
**CITY.**

Gentlemen:—

The accounting system as installed in the Bureau of Sewers recently has proven highly satisfactory in all respects. Placing the subordinates in closer touch with their immediate superiors by reason of required reports of materials, labor, etc., of each job to arrive at unit costs for comparisons has resulted in reducing expenditures in the maintenance department by a gratifying amount.

Yours very truly,

(Signed) **ED. F. LEIDEL,**  
**CHIEF ENGINEER.**

**CONTRIBUTORS**

About fifty business houses and individuals contribute to the Citizens' Bureau. Their subscriptions are for amounts ranging from \$50.00 to \$500.00, generally for a three-year period. The Bureau has just recently been re-financed for another three-year period.

## CHAPTER VII

### THE BUREAU OF MUNICIPAL RESEARCH OF THE MINNEAPOLIS CIVIC & COMMERCE ASSOCIATION<sup>1</sup>

#### *Circumstances Leading to the Formation of the Minneapolis Bureau of Municipal Research*

In September, 1913, the City of Minneapolis voted down a home-rule charter of the commission type. This destroyed, for the time being, all chance of a radical change in the government organization. The Minneapolis Civic & Commerce Association, an organization with over 3,000 members, decided that the most scientific method of improving the city government was to develop the best possible administration under the present charter and, by the study of Minneapolis conditions, to determine changes needed in the form of government. A committee on municipal research was appointed to establish and superintend a bureau of municipal research. Funds were provided from the general budget of the Association. The bureau was opened in December, 1913, with Frank S. Staley, as director.

#### *The Initiation and Fundamental Policies of the Bureau*

A series of luncheons was given by the committee to introduce the director of the bureau to the city officials and council members. These meetings gave an opportunity for discussing the problems of the various city departments and for showing the city officials how the bureau could be of assistance to them.

The general policies of the Bureau were early set forth in the following statement of principles:

The purpose of the Bureau of Municipal Research of the Minneapolis Civic & Commerce Association shall be to promote efficient and economical government in the City of Minneapolis and in the County of Hennepin.

To this end the Bureau shall endeavor, through co-operation with public officials, to secure the adoption of scien-

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<sup>1</sup> Prepared for MUNICIPAL RESEARCH from data furnished by Mr. Frank S. Staley, Director Bureau of Municipal Research of the Minneapolis Civic & Commerce Association.

tific methods of accounting and administration and to collect, classify, analyze, correlate and interpret data with reference to the conduct of public affairs.

In co-operation with and in behalf of the public, the Bureau shall attempt to secure constructive publicity in matters pertaining to municipal problems and so to interpret the facts as to secure an increased confidence on the part of the public in the activities of its officials and a more intelligent support for legitimate municipal projects and administration.

To act as a clearing house and point of contact between the citizens of Minneapolis and their public servants for the purpose of securing a better understanding and co-operation between them.

At the start the bureau was naturally regarded with curiosity, if not with suspicion. This attitude gradually changed as it became apparent that the bureau was more interested in assisting the department heads to improve their administration than in appearing before the public as snap-judgment critics of the administration. Before the end of the first three months, the city council passed a resolution accepting the bureau's offer of its service and directing the heads of departments to render any service the director might request.<sup>1</sup>

The Minneapolis bureau of municipal research has followed the policy of serving the city departments and of letting the publicity concerning its work come from the departments benefited by its efforts. In making surveys, the heads of the departments surveyed have been kept informed of conditions found and have been consulted on the practicability of suggestions under consideration. It was found, in many cases, that the department heads and their subordinates were quite alive to the defects in

<sup>1</sup>The text of this interesting resolution follows:

MINNEAPOLIS, Feb. 20, 1914.

TO THE HONORABLE CITY COUNCIL:

GENTLEMEN: Your Special Committee on Finance, to whom was referred at the meeting held February 13th, 1914, a communication from the Minneapolis Civic & Commerce Association relative to the organization of a Bureau of Research under the direction of Mr. F. S. Staley, respectfully report and recommend that the city accept Mr. Staley's services as offered by the Committee on Municipal Research of the Civic & Commerce Association and that the heads of the various departments be and they are hereby directed to render Mr. F. S. Staley any service that he may request and we further recommend that Mr. Staley's report be submitted to the City Council.

Respectfully submitted,

GEO. B. B. HILL, KARL DELAITTRE, L. N. RITTEN, A. E. VOELKER, P. B. GETCHELL, M. P. McINERNY, JOHN PETERSON, EDWARD W. HAWLEY, D. C. BOW, W. M. HOOKER, J. D. WILLIAMS, PLATT B. WALKER, COMMITTEE.

Adopted.

organization and methods but that, under the pressure of the routine work, they were unable to work out and install the needed administrative changes. Many of the suggestions in the survey reports originated with the departments.

The demand for the bureau's service in crystallizing into definite practicable form proposed changes and for its assistance in installing the new systems has grown steadily in the two years and a half since it was organized.

#### *Surveys and Inquiries.*

Shortly after its organization, the Bureau made its first departmental survey—an examination into the newly organized civil service office. The commission had been unable in the four months of its existence to complete its records of all city employes and at the same time to handle the current business. The bureau assisted in bringing these records up to date to give the commission a fair chance to make good. Practically every suggestion made by the bureau was accepted. Many changes in the forms and procedure were made which resulted in uniformity in returns from departments and in saving time and money.

In the two years and a half since its organization the bureau of municipal research has on request made additional departmental surveys of the health department, garbage and ash collection and disposal, the city hospitals, the business administration of the public schools, the comptroller's office, business procedure of the Institute of Arts, the park board and the police department. Special assistance has been given to the purchasing agent, the water department, the board of tax levy, the city assessor, the fire department, the municipal baths, to various committees of the city council and to the state legislature. A community survey of one ward was made for the benefit of the social agencies at work there and the administration of one settlement house in the ward was studied. The University of Minnesota requested a survey of the business administration of the Medical School and on its completion the bureau was asked to detail one member of its staff for a four months' study of the general business administration of the University.

#### *Significant Constructive Achievements of the Bureau of Municipal Research*

The more important constructive results of the bureau's activities follow:

*Accounting*

For two years a uniform expense classification by the bureau has been used by the city departments in presenting their budget estimates. This gives the board of tax levy the basis for intelligent comparison between the expenditures for different years and between departments. Several of the departments have used the bureau's assistance in analyzing their expenditures and in preparing their estimates. The board of tax levy pronounced the last summary of budget estimates, the most satisfactory ever submitted.

The uniform expense classification has been used in the new accounting systems installed in the health department, the park board, and the board of education. It is to be used in all departments as soon as the accounts can be reorganized.

The comptroller, with the help of the bureau, has installed a new system of appropriation control which keeps the heads of departments informed of disbursements and encumbrances under their appropriations. The system enabled the departments operating under the current expense fund to decrease the over-expenditures at the close of the year from \$35,578.35 in 1914 to \$14,421.94 in 1915. This decrease was made, notwithstanding the fact that the current expense fund was \$120,350.00 less in 1915 than in 1914.

The entire accounting system and business procedure of the comptroller's office has been modernized in so far as changes could be made without legislative enactment. The process of reorganization so awakened the interest of the employes of the department that they organized a class to study the problems of modern municipal accounting and asked a member of the bureau staff to act as instructor. Although voluntary, the attendance at the nineteen meetings held this winter has averaged 85 per. cent.

*Purchasing*

Until 1915, the city purchasing agent was authorized to purchase for the departments under the city council, and the three boards, school, park and charities and corrections, each maintained separate purchasing divisions. A legislative act in 1915 made possible complete centralization of the purchasing function. The director of the bureau of municipal research served on the committee of city officials which drafted the ordinance prescribing the procedure under which the purchasing agent should

handle the purchasing for all the city boards and departments. The new law also made it possible for the board of education and the board of charities and corrections to take advantage of the discounts for cash payments. The procedure for preparing bills for cash payment was developed with the assistance of the bureau.

During March, 1914, the newspapers charged that the city clerk was unlawfully retaining fees taken in by his office. The bureau was asked by the special council committee on finance to investigate. It was found that no records were kept of fees charged for, acknowledgments, drawing papers, satisfactions, etc., fees which the city ordinances did not specifically state should be turned in to the city treasury. The documents on file for 1913 showed that if charges were made for all these services at the rates established by the city clerk's office, \$746.45 had been retained by the city clerk during 1913. The council immediately passed an ordinance requiring that all fees taken in by any city employe be turned in to the city treasurer. The city attorney later ruled that all such fees which had been retained by city officials belonged to the city. The council accordingly ordered that any official who had retained fees under the previous interpretation of the law should refund them to the city.

#### *Health*

When the bureau of municipal research surveyed the health department in the spring of 1914, it was found that 68 per cent of the so-called health appropriation was being spent for garbage and ash collection and disposal. On the recommendation of the bureau of municipal research, the city council transferred the administrative supervision of this function from the commissioner of health to the city engineer. The disposal of all city wastes was thus placed in one department and the health department was left free to devote itself to strictly health activities.

The health department was also operating in 1914 the small-pox quarantine hospital, although all other city hospitals, including the tuberculosis and contagious disease hospitals, were under the board of charities and corrections. The suggestion was made that there would be greater economy of operation, if the quarantine hospital were run in connection with the other hospitals. The transfer was agreed on and became a fact January 1, 1916.

In addition to these changes of function, the health department made numerous changes in administrative methods for the pur-

pose of obtaining more complete and usable records of its work. The contagious disease records were put on cards instead of being kept in books, the tuberculosis registration system was completely revised and every case checked to see that the patient was still in the city; new score cards were drawn for restaurants and markets; continuous records for licensed food vendors were installed; the complaint system was reorganized; a system of accounts distributing expenditures by function and according to the uniform expense classification was installed; the birth records were indexed; and numerous changes in office arrangement and procedure were made to make the records more promptly available for administrative use. The bureau's help was also requested in the drafting of an ordinance licensing food shops.

#### *City Hospital*

The city hospital requested the assistance of the bureau in preparing a system of daily and monthly reports from the heads of divisions to keep the head currently informed of work done and the occurrences which required his attention. Because the hospital found itself short of funds an investigator was employed, on the advice of the bureau, to obtain the necessary information concerning the financial status of the patients admitted to serve as a basis for charges for hospital service. This service also protects the hospital against admitting those who can afford to go to private hospitals.

The hospital has just adopted the Bellevue disease nomenclature and has installed, with the co-operation of the bureau, a disease index for the use of the staff doctors in studying the clinical records. The new system makes the hospital's disease records comparable with those of the University of Minnesota hospital and many of the other large hospitals of the country.

The system of handling linen stores now in use at the hospital was devised by the bureau and the new method of control over linen sent to the laundry was suggested at the time of the survey. The superintendent of the city hospitals has requested the bureau to devise and install a new system of accounts.

#### *Education*

Following the bureau report on the business administration of the Minneapolis public schools, the board of education consolidated its two business divisions, placing the auditor under the business superintendent. A division of school architecture was

created to design and supervise new building and repairs to present buildings. The first annual survey of the physical school plant was made to enable the board to put the repair and improvement of buildings on a budget basis. A system of job costs was installed to show the complete cost of each piece of work performed and to serve as a basis for estimating the cost of needed repairs. The system of stores accounting was completely revised and the storehouse facilities were increased, thus enabling the business superintendent to inspect more carefully goods received and to maintain a closer control over goods issued. The purchasing system was revised as to the methods of estimating supplies needed and the preparation of schedules showing definitely articles wanted, arranged so as to be convenient for bidders. (The board's purchasing has now been transferred to the purchasing agent.) A new accounting system conforming to the uniform accounts in the comptroller's office was installed. The bureau's assistance was used both in planning the reorganization and in putting the plans into effect.

The board of trustees of the Institute of Arts found that the accounting system and business procedure of the Institute did not meet its needs and requested the bureau of municipal research to develop a new system and procedure. On its acceptance, the bureau was asked to make the installation and to assist the newly appointed bursar in familiarising himself with the duties of his office. The business procedure of the School of Fine Arts was also revised.

The survey of the business administration of the University Medical School resulted in the transfer of the departmental stores to the central University storehouse and in reducing the size of the machine shop force to enough mechanics to care for the special laboratory apparatus, leaving the general care of the building to the central shop.

#### *Parks*

The board of park commissioners accepted the recommendations as to its business procedure contained in the survey report and asked that a member of the bureau staff take charge of the office during the process of reorganization. A complete new accounting system, a stores system and a central filing system have been established. The office has been rearranged to give the employes a better chance to work and the new accountant has been made office manager. In addition to these changes in



the central office, the park board, with increased funds, is largely increasing its recreation staff and equipment, is starting on a comprehensive boulevard paving plan, has increased its publicity and has made it more popular in character, and has lengthened the park season by opening the refectories and pavilions earlier in the spring. The superintendent of parks in preparing his 1915 annual report modified his former style of report along the lines suggested by the bureau.

#### *Social Welfare*

The Sixth Ward Survey was the first of a series of sectional studies made for the purpose of determining what sort of conditions socially and governmentally, the City of Minneapolis provides for its citizens. The park, school and library facilities, the provision of sewer and water, fire and police protection and housing conditions were the features of the city administration studied. The work of the social agencies and, to a limited extent, the social and economic influences existing in the ward were included in the summary report. From the standpoint of the bureau, the study served as a field test for judging the efficiency of the city departments. The report with its suggestions for needed changes was given to the social agencies in the ward. It contributed toward a closer co-operation between the agencies, the organization of a "Boy City" and a vigorous movement to obtain a park playground for the district. The settlement house survey was used by the new resident director in his reorganization of the settlement's activities.

In the fall of 1915, the police survey was started. No report has as yet been issued but the process of reorganization is well under way. During the winter, a detective bureau has been established with a chief of detectives in charge and the detective records have been revised so that the chief can maintain a close check both on each case and on the work done by each man. The morning "stand-up" of prisoners has been started to give the detectives a chance to familiarize themselves with criminals. The finger print records have been classified and made available for use in identifying criminals. Regular conferences are being held between the captains, lieutenants and sergeants to keep them informed of the administration of the force and of the general police conditions throughout the city. Automobiles have replaced motorcycles for use in the outlying districts. The patrolmen have been assigned to eight-hour days to enable the men to

give the department their most efficient service. Last November the department started a training school for patrolmen. The entire system of police records is going through a process of revision.

*Statement of the Present Program and Outlook for the Future*

The Minneapolis Bureau of Municipal Research is at present at work on the following assignments:

- a. Completing the installation of the business system in the office of the board of park commissioners
- b. Finishing the police survey and assisting in the reorganization
- c. Making a comparative study of the cost of building inspection at the request of the building inspector
- d. Assisting Dr. Geo. B. Young of the United States Public Health Service in his survey of the public health situation in Minneapolis
- e. Assisting the superintendent of the city hospital in the organization of the city physician service

The bureau of municipal research has agreed to make surveys of the public library, the fire department, the purchasing agent's department, and the water works department. A new accounting system is to be installed in the city hospital as soon as men are available for the work. The bureau keeps in close touch with departments already surveyed and gives them special service when called upon. Several requests for surveys have also been received from social and charitable agencies.

The original purpose of the bureau included the same type of service for the county that has been rendered to the city. The pressure of municipal work has, as yet, prevented work with the county officials except assistance in preparing their budget estimates for the board of tax levy. It is expected that within the next year the bureau will be in position to give the county officials such assistance as it has to offer. There is also an increasing demand that the state departments shall be given the opportunity to make use of the bureau's facilities for improving government administration.

*Outside Appraisal of the Bureau's Services to School Administration*

"THE SCHOOL BUSINESS SURVEY"

"If the Civic and Commerce Association were to accomplish not another thing this year, it would have completely justified its existence and repaid

CITIZEN AGENCIES FOR RESEARCH IN GOVERNMENT

all the time, money and effort that have been invested in it by its survey and report on the business administration of the Minneapolis schools.

"Superintendent Spaulding and the School Board, conscious of the need of a complete overhauling of the methods in use, feeling that there was waste and inefficiency, but not being precisely certain of how best to reform, invited the survey.

"It has been friendly, but thorough. It has resulted in a series of recommendations calculated to make the taxpayer's dollar accomplish the utmost of its possibilities.

"The School Board, or a majority of its members, have received these recommendations in a spirit of cordial co-operation, so that there is every prospect that the findings of the survey will in due course be translated in accomplishment."—Editorial, *Minneapolis Journal*, March 11, 1915.

"NEW SYSTEM TO BE PUT IN OPERATION BY BOARD'S ORDER

"Unanimous approval of the Minneapolis board of education is stamped today on the recommendations of the research bureau of the Civic & Commerce Association for a new system of business management of the public schools. True to the exclusive forecast published in *The Journal* yesterday, the board took action quickly and positively and the machinery promptly was set in motion to devise a new system based on the proposals of the research bureau."—News Item, *Minneapolis Journal*, March 10, 1915.

"PUBLIC SCHOOL BUSINESS

"The plan of public school reorganization in which Superintendent Spaulding and the Research Bureau of the Civic & Commerce Association are co-operating, is wide in extent and varied in aspects.

"But the spirit of the whole is to try to run the schools as a successful private business is run, with wise economy that neither wastes nor spares, complete use of all instruments, teachers or buildings, and their effective operation for the highest accomplishment of useful education.

"This spirit governs the program of teaching and curriculum, indicated by Dr. Spaulding to the teachers and supervisors, as it does the program of administration and finance outlined by the Bureau.

"To thin out the superfluous in special courses and decorative additions; to strengthen the teaching force by making merit and capacity the test of advancement; to reconstruct the curriculum for the highest preparation for practical life after school; to enlarge the night and summer school training for the many to whom regular sessions are inaccessible—these will make public education of Minneapolis a school of business and industry for many, as well as a school of college and the professions for a few, and a school of citizenship for all.

"The particular methods of working out these high ideals have been approached by the Superintendent and the Bureau with thoughtful deliberation and an open mind."—Editorial, *Minneapolis Journal*, March 15, 1915.

"THE MINNEAPOLIS SCHOOLS BUSINESS SURVEY

The first strictly business survey of a city school system to be undertaken, was that completed in February in Minneapolis. This survey was conducted by Mr. F. S. Staley, Director of the Bureau of Municipal Research of the Minneapolis Civic & Commerce Association, and lasted sixteen weeks. It was made at the invitation of the board of education and was conducted throughout in a spirit of co-operation rather than hostile criticism, as should be the case in all school surveys. The facts were collected and presented with a desire to make plain the actual conditions, and to co-operate in any way possible in the correction of such defects as became apparent.

"The report of the survey which has been published, is far more than an exposition of conditions in Minneapolis as the surveyors saw them. It will be of national interest as presenting a clear-cut statement of fundamental principles in school administration, as related to this aspect of a school board's work."—Extract from *The American School Board Journal*, May, 1915, Milwaukee, Wis.

MINNEAPOLIS BUREAU

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"MINNEAPOLIS SCHOOL ADMINISTRATION

"The report of the Committee on Municipal Research of the Minneapolis Civic & Commerce Association, made at the request of the Board of Education of that city, on the business administration of the public schools, is a model of its kind. The 'Survey' includes the intelligent and thorough study of the operation, maintenance and construction of buildings, of the purchasing, storing and distributing of supplies, and of the handling of the accounts of the board.

"The report, which has come to us in manifold form, justifies these conclusions by a detailed description and analysis of existing conditions. The whole is illuminative and convincing, both as the successful solution of a specific problem and as an illustration of the business sense which should and can prevail even in the conduct of the affairs of public education. A report of this kind and calibre is serviceable, not alone to the city for which it is directly intended, but it may well be made a text for a sermon to the increasing number of those municipalities that are in search of light on the better organization of their public school systems. Even better still, it is to be strongly commended to the careful consideration of the many that are still satisfied with the systems which they have."—*Educational Review*, June, 1915.

"CITY BOARDS WILL BE GIVEN HEARINGS ON FUNDS WANTED

"The civil service commission has included in its request again this year an item of \$15,000 for the establishment of an efficiency division, but it is reported that there is little expectation that it will be allowed inasmuch as similar service is being rendered the city without charge by the municipal research bureau of the Minneapolis Civic & Commerce Association. The bureau aided City Comptroller Dan C. Brown in compiling the new budget which was pronounced by the board the most satisfactory yet submitted."—Extract from News Item, *Minneapolis Journal*, September 26, 1915.

## CHAPTER VIII

### THE BUREAU OF MUNICIPAL RESEARCH OF AKRON<sup>1</sup>

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#### *Organization and Work*

The Bureau of Municipal Research, although an independent body, both in its organization and work, is affiliated with the Chamber of Commerce, and was organized through the efforts of a former President of the Chamber and of one of the committees. It has frequently been the means of providing chamber committees with data for their work.

The Bureau was formally organized Nov. 16, 1914. Its Directors began active work, January 1, 1915.<sup>2</sup>

#### *Accounting*

For a number of years the larger cities of Ohio have felt keenly the need of progress in municipal accounting. The present inadequate system was installed in 1902. It was a big improvement over the utterly unsystematic accounting conducted prior to that date. The primary purpose of the system was uniformity. On the other hand, that system provided only for information regarding the receiving and disbursing of cash. Accruals were not taken into consideration. Income and expense statements and balance sheets could not be produced from the information provided by that system.

Among the first studies made by the Bureau was a survey of the accounting system. The result was the beginning of correspondence with the state bureau of uniform accounting relative

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<sup>1</sup> Prepared for MUNICIPAL RESEARCH from data furnished by Mr. F. L. Olson, Director of the Akron Bureau of Municipal Research. The facts are taken from the annual report to the trustees and members, January 1, 1916.

<sup>2</sup> The organization of the Bureau is as follows:

OFFICERS.—President, F. M. Harpham; Treasurer, J. E. Good; Secretary and Director, F. L. Olson.

BOARD OF TRUSTEES.—J. H. Andrews, H. S. Firestone, J. E. Good, F. M. Harpham, F. A. Seiberling, E. C. Shaw.

to the possibility of change: Such change was promised, but was so tardy in its appearance that the Bureau engaged the services of Mr. L. A. James of the Ohio Institute for Public Efficiency located at Columbus, to make available for Akron the general scheme as outlined by him for Toledo and Columbus. The consent of the state bureau for the use of mechanical devices was obtained.

The general principles of the accounting scheme agree with those laid down by the state, and have been installed by the City Auditor. It includes the following general features:

1. *Central collection of revenues by the treasurer*.—Heretofore, revenues other than taxes have been collected in 10 different departments. This will be reduced to 3 where location of the department or nature of the revenue makes impracticable collection by the treasurer.
2. *Central control of accounting by the auditor*.—All orders will be given by the auditor upon requisition of the department through the purchasing agent who will do the actual buying. All invoices will come first to the auditor's office where they will be scheduled, given a serial number and sent to departments for codifying and approval. Warrant will be issued upon the treasurer only after the funds of the department show themselves sufficient to pay for the same.
3. *General ledgers based upon subsidiary ledgers currently controlled and audited*.—The appropriations of council will be set up individually, one item constituting one account. The mechanical devices make possible showing the previous balance, distribution of a charge, subtraction of a credit and automatically producing the net balance in the fund. In that way, the unencumbered balance of an appropriation is available and over draft as impossible as it is inexcusable. A claimant's ledger will be maintained. It is posted daily directly from approved invoices and returned warrants showing in the same way as the expense ledger does, the condition of the city's account with each vendor. Special assessment ledgers, contract ledgers, and bond fund ledgers will reflect the condition of each account in those funds. A property ledger will give the basis for showing the general assets of the city.
4. *Monthly income and expense statements of each department and of the entire city*.—Heretofore, accurate information has always been lacking or at least difficult to obtain. The general public almost never heard of the finances beyond appropriation periods. The new accounting system will produce information currently.

5. *Monthly and annual balance sheets of the city*:—It has been impossible to obtain these heretofore as the essential elements were unknown before the change in accounting.

To sum it all up in a few words:—Where the city has had no information or has had misinformation, it will now have information, accurate, complete, and currently produced. The auditor will be in full control and can no longer say—"I didn't know."

#### *Budget*

Lack of information as a basis for preparing the semi-annual appropriation ordinance, was felt to be of sufficient importance to warrant the inauguration of advance steps in budgetary procedure. To that end, the Bureau analyzed the expenditures of each division and department for the year 1914. Those expenditures were distributed on the basis of the titles tentatively agreed upon for the new accounting system. Forms were drawn up and submitted to the city auditor and the mayor who adopted them as official and requested department heads to submit their 1916 budget on those forms. The changes introduced, made the requests definite as to character of transaction, i.e., whether operation, maintenance or outlay, and as to the object of expenditure, i.e., whether personal service, supplies and materials, contractual services, etc., gave details instead of totals, afforded opportunity to compare future requests with past expenditures, and left space to enter council's recommendations. Instead of general, indefinite and overlapping titles as in former budgets, there were used these uniform titles for all departments:

- A. Personal Service.
- B. Supplies—subdivided into 16 classes.
- C. Contractual Services subdivided into 18 classes.
- D. Fixed Charges, e.g. Rent, Taxes, Insurance, etc.
- E. Contributions, Awards, etc.
- F. Maintenance of Lands.
- G. Maintenance of Structures and Improvements, subdivided into 18 classes.
- H. Maintenance of Equipment, also subdivided.
- X. Outlay for Lands.
- Y. Outlay for Structures and Improvements.
- Z. Outlay for Equipment.

Thus the first step toward a real budget was taken. Similar detailed information was prepared for the appropriation ordinance of the first six months in 1916. Analysis has been

made of the expenditures from January to June, 1915. In addition, those expenditures are tabulated by months and by articles purchased so as to give council every bit of available information to do the best possible work.

#### *Civil Service*

Among the most important activities of a municipality is the operation of civil service. By it is determined very largely the progressiveness of city business. Elected officials come and go, but civil servants—the men who do the daily routine—remain year after year. The success of an administration depends far more upon the inspectors, the bookkeepers, the stenographers, the clerks, etc., than upon the mayor, the council or even the higher appointive officials.

For the above reasons, the Bureau has given much attention to the conduct of civil service in Akron. By all possible legitimate methods, the Bureau has called the attention of the commission, the council, the mayor, and the general public to the utter lack of means to properly carry out the simplest features of the civil service law of Ohio. Attention has been directed to the need for higher standards in examination, higher standards of service, more expert help to operate civil service, more and better records of examinations, candidates, etc., introduction of efficiency ratings of employes, etc. Up to the present time, (January, 1916.) much of the work has been of no avail.

However, from time to time, the Bureau has, by request, assisted in making out examination questions, and frequently has been able to provide material for the Commission.

#### *Finance*

To fulfill the purpose described in the statement of the reason for organizing the Bureau, viz., the inability of chamber committees to obtain facts and figures to explain the finances of the city, the Bureau spent much of the first six months of its work in studying in detail the financial condition of Akron. On August 15, 1915, a report was released, the first of its character in the city, attempting to give the public a brief description of the causes leading up to annual deficits. It was clearly demonstrated that the city labors under three severe handicaps:—first, its form of government so definitely predetermined in the statutes as to eliminate flexibility; second, the demand, by the sinking fund, through the provisions of the "Smith One Per Cent Law,"



for increasing proportions of revenues that normally belong to current operation; and third, the lack of efficient administration. As an outgrowth of those conditions the following recommendations were suggested as affording means of partial relief:

REMEDIES POSSIBLE WITHOUT A CHANGE OF LAW

1. The city should have an appraisal of property and equipment to give proper basis for budget estimates, accounting control, and financial planning.
2. The city should establish a purchase and stores department, to give an inventory for use in intelligent budget estimates.
3. City merchants should co-operate with the auditor by refusing to honor requisitions not signed by the auditor.
4. The auditor and not departmental officials should exercise power of determining proper distribution of expense.
5. The new budget system used for 1916 requests should be officially adopted and greatly extended so that estimates shall in the future be made on a scientific basis with economy in view. Present practice depends too much upon memory and snap judgment, since records do not exist to show past expenditures, stock used and on hand, in comparison with present expenditures and future needs.
6. The finance committee of council should continue this year's practice of holding departmental hearings at which departments should be required to present further evidence of needs, and be prepared to answer questions regarding the requirements of their departments. In turn, the finance committee should show reason for recommendation of both increases over and decreases under past allowances. A final hearing should be held by the committee at which taxpayers and all others interested may be heard.
7. Council, co-operating with departments, should adopt in advance an annual public improvement program. This program should then become a part of the budget. Such information, based upon a study of the city debt, should act as a check upon borrowing to finance public improvements.
8. The present city debt indicates that no more bonds for general public improvements of a nature similar to the water works, sewage and garbage plant should be issued. Demands upon city revenues are such that the assumption of further burden must cripple city departments even when strictest economy is practiced.
9. Only such special improvement bonds like paving, etc., should be issued as are demanded, by protection of the health and general welfare of the community, or those for which property owners are willing to pay the entire cost.
10. A new accounting system is needed that will show, at any given period, the city's financial condition. To do this, there should be introduced in the auditor's office, general ledgers, subsidiary ledgers, contract ledgers, property ledgers in addition to the present bond ledgers. Departments should keep expense ledgers, and where applicable, cost accounts; daily time and service records should be established at once to give basis for proper distribution of costs. Monthly statements of work should be sent by each department with a summarized financial statement of the city and a statement of the appropriation account of the department. Council should pass a resolution making available each month only 1/12 of the total funds for permanent salaried force, in supervisory, clerical and labor positions. This provides a means of comparing work performed with money expended on the basis of a unit of time. It also provides initially for a work program for every month since it is definitely known how much money will be available for that month, whether it be the present or some future month.

## THE AKRON BUREAU

### REMEDIES NEEDING CHANGE OF LAW

1. The Smith Law should be revised. If a definite limitation *must* be placed upon taxes available for current operation, an alternative to the present plan would be to place all sinking fund and interest charges outside the amounts necessary for current expenses and then hold the various taxing districts to a maximum levy for those purposes. For example, it is not so important to decide annually whether the city shall have the total of 1/2 per cent as it is to decide once for all upon some definite amount, whether that amount be .3 per cent, .4 per cent or .5 per cent. In addition, the present provision of law should be continued permitting the city to go before the people and ask them to vote an additional amount up to a maximum levy to be determined by law.
2. To prevent the need of borrowing in anticipation of collection of taxes the fiscal and tax paying years should be made identical. As the arrangement now exists, 1915 taxes, due December, 1914, were collected during January, 1915, and were transferred to the city treasury in March.
3. Taxing districts should be given representation on the budget commission. Proper presentation of the city's needs is impossible with a commission made up of members unacquainted with the city's business, and representing a taxing district which must urge its claims with the city's for its share of the 1 per cent tax levy.

As a direct outgrowth of the Bureau's study of the city's finances, came its assistance to the auditor in preparing his annual report so as to more truly reflect the condition of the city and provide financial information never before available. To accomplish that task, all expenditures for 1914 were analyzed. This necessitated scrutinizing practically each and every voucher paid in order to determine its proper status in the report. The result was the publication for the first time in Akron of these facts:

1. A current Operation account showing a deficit in ordinary running expenses.
2. Sinking Fund and Trust Fund accounts.
3. Summary sheet showing Income and Expense of the city by Functions and Departments and by character of expenditure.
4. Detail Income and Expense accounts for each department and division showing the net cost of operation which in some cases was a gain.
5. Total and detail bonded debt statements by Purpose, Title, Year and Rate of Interest.

The same information is now being prepared for the 1915 report, so that in future years accurate comparative statistics of each department and of the city as a whole, will be available.

### *Public Works*

Among the first investigations of public works, was a study of the new water works system. The demand for an additional bond issue to be voted on, seemed to warrant a complete statement of the project—legislation, bond issues, construction,

contracts, etc., in order that the public might have proper information as a basis for voting.

Following that statement a report was issued showing the intended distribution of the successful bond issue of \$600,000. A study was made of the need for main extensions and reinforcements, resulting in an agreement to reduce the former item \$35,000, and the latter \$38,000, so that instead of spending a total of \$191,000, the department agreed to postpone the expenditure of \$73,000.

At the beginning of the Bureau's work, the city had under construction, by order of the state board of health, a sewage disposal plant. Due to a stringency in the money market following upon the opening of the European war, and as an effect of a court decision relating to bond issues for such plants, the bond buyer refused to take more than \$27,000 of the \$446,000 bond issue he had purchased. Hard upon that condition came the consulting engineer's second increase in the estimate of the cost to build the plant. Initial approximate estimates had grown from \$350,000 for a complete plant, to \$446,000 and finally to \$553,000. The bond issue of \$446,000 was therefore not enough. The particular question studied was that of the means by which the city could get a plant able to provide ample sewage facilities for Akron for some years, and at a total cost not to exceed the original bond issue of \$446,000. Facts placed before a special committee of the chamber led to a series of conferences with city and state officials, the contractor and the engineer, resulting in a final reduction of \$107,000, thereby making unnecessary any additional bond issue to complete the plant.

In order to prepare for collection of garbage, the Bureau assisted council and the service department in a study of that problem. On the basis of the report submitted, the present contract method of collection was adopted and the appropriation to cover the cost of collection decided. The Bureau assisted also in preparing the specifications and the contract for bidders.

#### *Public Welfare*

Due to the prevailing unsatisfactory labor conditions during the winter of 1914 and 1915, the Bureau, by request, undertook a study of the unemployment situation in Akron through a careful analysis of the records of the free employment bureau. The study brought out the facts first, that the records themselves were incomplete and frequently unreliable due to misstatements

by applicants; second, that the persons out of employment were largely of two kinds—those whose occupations were seasonal, e.g., building tradesmen, etc., and those who could do no work other than manual labor like excavating, etc., and third, that most of the unemployed were foreign-born people unable to easily adjust themselves to conditions as severe as those of 1914.

The large number of arrests together with the utterly inadequate facilities for taking proper care of prisoners and the increasing cost of sending prisoners to other cities, caused the chamber of commerce and council to investigate the possibilities of establishing a workhouse in Akron. The Bureau rendered assistance by gathering information from other cities and was able to show that the cost of constructing and operating a workhouse would be so great as to become prohibitive. This was accentuated by the fact that after January 1, 1916, cities were no longer to be allowed manufacture goods by prison labor for profit. The needs of other departments in Akron for products of inmate labor is too small to warrant an outlay that would pay the bonds and interest on the investment. The project was therefore abandoned.

#### *Publicity*

Among the purposes of the Bureau as stated in its constitution is the following:

“To promote efficiency and economy in municipal, county and state administration by securing proper publicity in matters of public business.”

Since its organization, the Bureau has released reports, statements and bulletins to the public press. It has prepared material for committees of the chamber which in one form or another has been made public. The Bureau's policy on publicity has been first, to get the facts, second, to submit the facts for correction to the official involved, and third, to give out the facts either through the official or, if through the Bureau, at a time when the publication will not jeopardise progress. Following the establishment of “*Public Information*” as the Bureau's official bulletin, the newspapers, particularly in two cases, have responded splendidly, carrying the matter almost verbatim. Their co-operation is now about all that could be desired.

The reports released during the year are:

1. Report of a Study on Improved Water Supply.
2. Digest of Departmental City Reports.

3. Report on the Financial Condition of Akron.
4. Report on a study of Street Cleaning.

The financial report was also published in pamphlet form under the title of "*Public Information*" and 3000 copies distributed. Requests from out-of-town organizations have been increasing.

On November 12, 1915, "*Public Information*" was adopted as the Bureau's official bulletin and since that date numbers have been issued weekly to a circulation that has grown from 1800 to 2400 copies. The following are the bulletins issued to January 1, 1916:

- No. 2—No Matter Who was Elected.
- No. 3—Can You Afford To Forget These Facts?
- No. 4—Twelve Faults with Suggested Remedies.
- No. 5—Tables That Tell Tales.
- No. 6—Shall the City Treasurer Collect Special Assessments?
- No. 7—Does it Pay to Know?
- No. 8—The Way to Reduce is to Reduce.

#### *Survey of Departments*

During the year just past the Bureau has made 6 surveys in 3 departments as follows—Accounting in the auditor's department; organization and records in the council clerk's office; bureau of street repair; bureau of street cleaning; division of streets in the service department, and a general reorganization survey of the same department. The survey of accounting has already been described.

A report of the survey of the clerk's office was submitted to council through the chairman of a committee. The occasion for the study was the change in office due to the resignation of the incumbent. The Bureau long had had evidence of laxness, lack of system, and general inefficiency in the conduct of the office and felt that before a new clerk took office, council should know the condition under his predecessor, in order to make necessary provision for corrections. The office was open at all hours; valuable records were either missing altogether or were frequently taken without receipt to other departments; much of the time of both employes was given to conversation with idlers who found the office a place to while away time; indexes to records were poorly kept and were not brought down to date; letters were not always filed; carbon copies were seldom made; transcripts of legislation in connection with bond issues were frequently sent out incomplete; files were inadequate and lacked

proper indexing. Some of the above defects have been corrected, others still exist.

Much criticism has been offered by the public of the repairing of streets. This criticism has been largely deserved. The Bureau with the consent of the service director undertook a survey of the needs of the bureau of street repair. With the assistance of an expert paver, the pavements were inspected and every break, depression or hole that needed attention within a year, was noted, measured and the cost of repair estimated. It was found that with six gangs and two or three teams, the pavements of Akron could be reasonably well repaired. The discovery was also made that sufficient funds were in the city treasury to pay for the entire program of repairs. This program was adopted by the department and much progress made between July and January. The remainder of the work will be continued in the spring. Unit cost records were also installed and a beginning made toward obtaining the much desired information of the cost per square yard of street repairs.

Following upon the survey of repairs, the Bureau took up the use of teams in the division of streets. The discovery was soon made that the superintendent had been long using his own teams in city work under the names of other persons; also that the names of individuals who owned no teams and who never did work for the city were also being used as a cloak for the real owners of teams,—*vis.*, the superintendent of streets and his brother. Those facts were brought to the attention of a special committee of the chamber, who took up the matter with the service director and the mayor. The ultimate result was the requested resignation of the superintendent of streets, and the holding of an examination to fill the vacancy. Following the Bureau's work, the state department through its examiners conducted a public hearing covering the same ground.

Early in the year, a survey of the bureau of street cleaning was begun in the form of a study of amount and rates of cleaning. This was continued into the summer and fall, each street being measured to determine the total area cleaned. The necessity for this detailed work was due to the fact that the engineers used wrong widths of streets in determining rates, that streets where sweeping was not done were being carried on the assessment roll, that inspection was utterly inadequate; that, if contractors' statements of the number of men employed were true, sweepers were obliged to clean daily from 4500 square yards to 31,500

square yards, the one amount too small, the other a physical impossibility; that disproportionate rates were charged, that sweeping the same unit area (10,000 sq. ft.) cost from \$0.13 to \$1.39; and that other equally defective conditions existed. The above report was released to the public in whole through the newspapers and in part through the Bureau's bulletin, "*Public Information.*"

Growing out of the investigation of the use of teams, came the request for a co-operative survey of the organization of the entire service department. A careful study and analysis was made of all records, and conferences were held with each of the division and bureau heads in the department. Thereupon statements of findings were submitted to each official involved with the request for correction, elimination or addition, according to the facts. Many valuable suggestions were received through that method. Following the return of those statements, a complete report was drafted and submitted to the director. The chief suggestions for change were these:

1. That the director be absolutely freed from detailed clerical work, and given opportunity to devote his time to initiating and administering the policies of the department.
2. That the position of complaint clerk be established in the director's office to handle all complaints, transmitting them to the proper officer and keeping a record of results.
3. That the present clerk be relieved of the complaint work, of giving out information, of answering telephones and of making out permits at any and all hours of the day.
4. That permits be granted upon application to the treasurer and the fee deposited with him. Permits would thus be filled out but once or twice a day.
5. That the division of parks and highways be created, the superintendent to have supervisory control over all street repair, sewer repair, street cleaning and park maintenance.
6. That there be created a bureau of street repair, a bureau of sewer repair and a bureau of street cleaning, each in charge of a supervisor, the salary of the last being met largely out of special assessments, and each officer directly responsible to the superintendent of parks and highways.
7. That the position of park superintendent be abolished and the duties be performed by a competent foreman under the direction of the superintendent of parks and highways.
8. That the bureau of inspection be transferred to the engineering division and made responsible directly to the city engineer.
9. That the city engineer be directly in authority over his division and be made responsible for profiles, estimates, plans, specifications and material in pavements and the inspection of the same.
10. That a clerk be placed in the engineering division to whom all daily time and service reports should come and whose duty it should be to compute the unit cost of work in the department.
11. That there be established a division of public buildings and grounds with a superintendent in charge whose duty it should be to have supervision over the market house, and all other public buildings.

- the repair of those buildings and their equipment, the rent of any property and the charge of janitor service, etc.
12. That daily time and service records be installed and required of each officer and employe.

Of the above suggestions, all but two were adopted, and one was slightly changed. The positions of cost clerk in the engineer's office and of superintendent of buildings and grounds were not created. Instead, a rodman with slightly different duties was made chief checker without increase in salary and the position of market house superintendent was abolished. An additional change was effected in combining, for the present, the positions of supervisor of street repair and supervisor of sewer repair into one position. It may therefore fairly be said that the essential features of the Bureau's program of reorganization were adopted.

#### *Training for Public Service*

The Bureau believes that the greatest need in municipal administration is a permanent corps of trained officials. The Bureau believes also that training for public service is best obtained through direct contact, i.e., by doing work that needs to be done.

A co-operative plan of such training was begun shortly after the Bureau was organized. Students of the Municipal University were given assignments dealing with real city problems; e.g., preparing a report on a comparison of city budgets for the past five years; analysing the bond issues and preparing a statement of the city's bonded indebtedness; comparative study of charters in commission cities; study of water main extension; study of school statistics, etc. Credit toward graduation was given by the University faculty for this work. It will be continued during the present winter.

#### *Miscellaneous Work*

Following a long-continued need and agitation for street signs, the Bureau investigated the number of signs needed, the cost of producing and erecting them and on the basis of its report to the service department, council appropriated \$1500 to place signs on the streets of Akron. This work is now under way.

The question of a bond issue of \$25,000 for widening Forge Street caused councilmen to inquire as to the reasons for the city paying any part of the cost of restoring that street to its former width. The Bureau undertook to get the facts together and submitted a report to the municipal committee of the chamber.



That committee held conferences with members of council, the mayor, service director and fire chief, and presented two questions: (1) Why should the city expend *any funds whatever* at the Old Forge when the street was so little used and in view of the great need for grade elimination in other parts of the city; (2) upon what legal basis could council issue bonds for an improvement of the above kind considering the fact that the railroad abutments were in the street (leaving only a 14 foot passageway), without any grant in county records and in view of the established fact that the road at that point has never been changed. Despite the question raised, the committee finally took the stand that since the city had carried the matter almost to the point of signing a contract with the railroads and in view of the fact that if the project was to be carried out, the city had driven a good bargain as to its share of the cost,—the matter should be left in its status at that point and action dropped. This was done.

By request of council, the Bureau made a digest of departmental annual reports for 1914 so as to provide each member with the important information contained therein. Copies were distributed to each councilman, the mayor, heads of departments, the chamber of commerce and the newspapers. The Bureau expects to offer its services in this respect for the reports of 1915.

Special assessments have been collected by the county treasurer along with the general property tax. A study of the statutes together with an opinion by the solicitor on the same, tends to show the legality of collection by the city treasurer. The desirability is based upon the control of revenues and the saving effected in fees now charged by the county for collecting that tax. The report recommended that the treasurer's and auditor's offices be combined or be arranged to provide greater convenience in transfer of documents and information, that the treasurer be given a clerk to aid in collection of the money and that that clerk take over the duty of recording assessments; work that is now performed in the auditor's office. The saving in fees the first year would more than offset the additional cost. To date, the suggestions have not been put into operation, although the auditor has expressed himself heartily in favor of the change.

The recording of special assessments was originally performed by the city clerk. When the office of city auditor was made independent of the city clerk, that duty was arbitrarily carried to the new office, perhaps because the city auditor had formerly

been city clerk and auditor, and therefore was merely continuing a duty that he had been performing for several years past. The method of recording is to write in a large book the name of each property owner, a description of his property by lot, block and addition, the rate of assessment for a particular year, and the total assessment for the entire period covering the improvement. This information is first gathered in the office of the city engineer, forwarded to the city auditor's office where it is made a part of other assessment records, and from the auditor's office certified to the county auditor for collection. The city auditor writes up his books on the basis of the improvement, arranging the names of property owners alphabetically. The county auditor writes up his books on the basis of wards, with the names in alphabetical order. This makes necessary each year two books to be written by the city auditor, one for himself on his own basis and one for the county auditor for purposes of collection on the county basis. The Bureau raised the question whether it would not be possible and save much time and unnecessary labor to place all information on a single card, making one card for each piece of property and merely changing the location of the card as the owner's name changed in alphabetical order, due to transfer of the property. On the reverse side of the card is carried a history of the improvement in so far as any legislation, court order or engineer's order affects the assessment for a particular piece of property. The auditor accepted the suggestion and the form that the Bureau drew up. This form is now installed and is being operated with entire success. It means a distinct saving of approximately \$1,000 a year, \$900 of which was paid for the salary of one clerk, the other \$100 being a minimum cost of new books each year.

#### *Recent Work of the Bureau*

The Bureau also assisted in the preparation of the annual report of the city auditor; prepared a report on the effect that annexation would have on city schools, which was well received; made an analysis of the cost of furnishing water, resulting in a rate that will meet all expenses as well as extensions for the next ten years; made a study of the purchasing department; prepared detailed information to be used as a basis in determining appropriations for the succeeding six months; assisted in the carrying out of a campaign against flies with the health department.

### *Plans for the Future*

The plans for the future include some of the following subjects:

- 1—Preparation of the annual budget.
- 2—Assisting health department to secure authority for enlarged program and a contagious disease hospital.
- 3—A study of the charter.
- 4—Analysis of the Gary school plan.
- 5—Continuation of analysis of local improvement assessments.
- 6—Improved system of bond issues and retirement.
- 7—General campaign for improvements to plan for five years ahead.

### *The Bureau Method*

The Bureau of Municipal Research does not pose as an organization of experts. It does believe that a non-partisan organization on the job every day in the year can gather together facts of value and can make suggestions worthy of consideration.

The essential features of a Bureau of Municipal Research are: *first—its permanency*; work of value can not be done by organizations that spring up today and disappear tomorrow; problems to be solved need continuous study. *Second—its non-partisanship*; the Bureau continues work whether the administration be Republican, Democrat, Socialist or Fusion,—the Bureau's existence and service bears no relationship to the political faith of any particular administration. *Third—its method*; the Bureau believes in (1) facts, (2) analysis of records of facts, (3) in the application of scientific principles to a study of facts, and (4) in conferences with officials on the facts before judgments or conclusions are drawn from the facts. *Fourth—its co-operation*; the Bureau believes in and has consistently attempted to give co-operation to officials in the study of all city problems. *Fifth—its publicity*; the Bureau believes in publishing facts for the enlightenment of officials and public alike. News is not always facts; facts do not always make news, which largely constitutes the difference between Bureau and newspaper publicity.

For a year, the Bureau has applied the above principles in all its work. In practically all cases, officials have recognized the possibilities of help and progress in the use of such methods, with the result that there has been little or no friction and much of pleasant co-operation. The Bureau expects to continue the

*THE AKRON BUREAU*

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same methods in the year to come and hopes for even greater results than the year just closed has shown. During that year there has been a distinct change of attitude and an increased interest on the part of the general public in the city's affairs as reflected in the newspapers and in comment to be heard in daily conversation. The Bureau hopes it may have been of some value in bringing about the change of attitude and increasing interest in public business. In so far as it has had a part in the progress of the city, it has justified its existence.

## CHAPTER IX

### THE BUREAU OF STATE RESEARCH OF THE NEW JERSEY STATE CHAMBER OF COMMERCE<sup>1</sup>

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#### *The Organization and Connections of the Bureau of State Research*

The Bureau of State Research is a department of the New Jersey State Chamber of Commerce which is an organization of the leading business men of the state who are interested, among other things, in maintaining New Jersey legislation at a high standard by seeking to base it upon scientific investigation and in supplying a non-partisan citizens' agency to keep the state in daily touch with the work of the legislature. The membership of the chamber, and the supporters of the Bureau of State Research, consist of individuals and federated civic bodies of the state making a total constituency of about 80,000 people.

The Bureau of State Research has been active as the legislative organ of the chamber for the last three years, but it was not given a definite name and distinct organization until October, 1915.

The Bureau of State Research, as at present organized, has a director, an advisory committee, a secretary and a staff of trained investigators. Other assistance is secured from time to time as it is needed.

The work of the Bureau of State Research consists, in the main, in publishing a weekly *Legislative Index* during the annual session of the legislature, supplying special legislative service, analyzing bills, and in conducting legislative investigations throughout the year.

#### *The Legislative Index*

Each week of the annual legislative session the Bureau of State Research has for the last three years published a *Legislative Index*. This publication gives a brief résumé of the contents of each bill introduced into the legislature together with the name of its introducer, and the date, and records each step in the progress of the bill from its introduction to its current status. These

<sup>1</sup> Prepared for MUNICIPAL RESEARCH by Mr. Paul Willard Garrett of the Bureau of State Research of the New Jersey State Chamber of Commerce.

brief digests are arranged in the order of the introduction of the bills in the senate and in the house of the assembly respectively. The *Legislative Index* contains an index of all bills introduced, which is designed to classify the various subjects of legislation and to indicate all of the bills which pertain to each of those subject heads.

In addition to the bill digest and the index feature, the index bulletin each week contains an analysis of some one or more of the important measures before the attention of the legislators. These analyses presume to attempt nothing more than to set out in tabloid form, and in a thoroughly non-committal manner, the essential features of the most important measures, for the convenience of the busy legislator and the busy citizen.

The *Legislative Index* is very popular throughout the state, where it serves as the medium by which the citizens watch legislation, and at the state house, where it is found on the desk of all legislators, and is used by them in following the course of the bills.

#### *Special Legislative Service*

In addition to the information contained in the weekly *Legislative Index*, a daily service is furnished to a number of civic organizations and individuals throughout the state. In order to satisfy this demand the Bureau has had blank forms printed, which can be made to show, with very little marking, what action is being taken on any measure. The Bureau investigators, who are always at Trenton during the session and in attendance at all of the meetings of the legislature, fill out or check these blanks and mail them immediately when any action is taken on any of the bills which are on the special service list. In some instances this information is conveyed by telegraph or by telephone.

#### *Investigations*

Throughout the year the investigators of the Bureau are making exhaustive legislative investigations of as many of the subjects awaiting study as can be handled adequately. These investigations are not based upon *a priori* conclusions or designed to build arguments for any particular side. They are intended to ferret out all of the facts in a "thorough and impartial" manner and thus establish fact bases upon which to make recommendations to the legislature.

During the last year the subjects of "State Rural Police Patrol" and "Corporation Audits" have been investigated and some study made of the state budget and the Torrens system.

#### *State Rural Police Patrol*

A bill designed to create a state police in New Jersey similar in character to that which has prevailed in Pennsylvania since 1905 was introduced at the legislative session in 1914 and again in 1915.

The movement both for and against a state police in New Jersey has been so strong, and the arguments pro and con so irreconcilable that the State Chamber directed the Bureau of State Research to make a thorough and impartial investigation of the need for a rural patrol in this state.

To this end an attempt was made to raise this problem above partisan considerations and place it upon a matter-of-fact basis. Statistical data have been tabulated showing the prevalent crimes in each county and the number of unapprehended criminals; the opinions of the prosecutors of the pleas, the sheriffs and the grange organizations have been gathered and compiled; and a record has been made of the causes and extent of forest fires in the state. This investigation has been very valuable in determining whether there is need in New Jersey for a state police to act as a rural patrol force.

#### *Corporation Audits*

The subject of corporation audits embraces the idea of protecting the investors in the securities of New Jersey corporations by a law providing that the companies' books shall be regularly audited by certified public accountants to be elected by the stockholders of the corporations instead of appointed by the directors.

A close study of the proposal contained in the 1915 bill, which is in line with a procedure found so effective in England, revealed the fact that any legislation of this character would conflict at so many points with the substantive statutes, that it would be advisable to first make a complete investigation of the present control and regulation of New Jersey corporations, before introducing any new elements of uncertainty.

#### *State Budget*

The Bureau of State Research, by calling attention to state's antiquated fiscal procedure and by contrasting the unscientific

method of appropriating money in New Jersey with the budget procedure in New York City, through its publications and the daily press, has been instrumental in creating a state-wide sentiment for a state budget.

In this connection it is interesting to note that the 1916 legislature of New Jersey did pass a commendable budget act.<sup>1</sup>

#### *Torrens System*

The Torrens system is the name given to a comparatively recent method devised for registering titles to land. At the request of the Real Estate Board and the Building-Loan League, the Bureau made an analysis of the Hennessy bill which was introduced in the 1916 legislature to give any New Jersey land owner the option of registering his title under a Torrens law.

This analysis was accompanied by a brief history of the Torrens acts and a résumé of the holdings of the courts on their constitutionality in the several states.

#### PROGRAM OF INVESTIGATIONS FOR 1916

During the year 1916 the Bureau has determined to confine its attention primarily, to the subjects of "Workmen's Compensation," the "Full-Crew" Law, and "Good Roads," which have had particular publicity in recent years, and have presented no small problems to the legislators.

#### *Workmen's Compensation*

The matter of workmen's compensation has had the earnest attention of the state of New Jersey for the past four or five years, and bids fair to prove a more important issue than ever at the next session of the legislature owing to the amount of discussion aroused by the Colgate bills. The Bureau of State Research is now gathering facts pertinent to a complete and unbiased consideration of the question.

#### *The "Full-Crew" Law*

In a spirit of absolute fairness to advocates and opponents, the Bureau of State Research is conducting a thorough investigation of the operation of "full-crew legislation" in this country, with particular reference to the law in New Jersey. This impartial study will be made from the standpoint of public welfare and will attempt to reduce the whole question to one of fact and definite principles on which issue may be joined.

<sup>1</sup>See MUNICIPAL RESEARCH, Nos. 70, 73.



*Good Roads for New Jersey*

Before the advent of the automobile, New Jersey roads ranked among the best in the country. Modern conditions have thrown such a financial burden upon the townships, counties and State that not only is the construction of new roads curtailed but the proper maintenance and repair of existing roads is impossible. \*

The Bureau of State Research is endeavoring by scientific research to find out the exact requirements of a road program adapted to New Jersey conditions in order to recommend to the legislature an efficient road policy.

The regular program of investigations of the Bureau is determined each year by the trustees of the chamber. In addition, the Bureau is authorized to supply a general legislative service, not only for the various departments of the chamber and its affiliated organizations but as far as possible for the State at large.

The Bureau of State Research has its office with the New Jersey State Chamber of Commerce at 15 Exchange Place, Jersey City, New Jersey.

## MUNICIPAL RESEARCH

To promote the application of scientific principles to government

Issued Monthly by the

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### THE ENGINEER IN PUBLIC SERVICE

BY

FREDERICK E. BREITHUT

PART I

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## THE ISSUES OF MUNICIPAL RESEARCH

Municipal Research, as a monthly of its present size, dates from January, 1915, No. 57. Preceding numbers were leaflets.

- | 1915  | No.   |
|---|---|
| 57. JANUARY—Next Steps in the Development of a Budget for the City of New York. (142 pp.) 50 cents.   | 66. OCTOBER—The Rights of Civil Servants. (202 pp.) \$1.00.   |
| 58. FEBRUARY—A "State Budget"—Proposals for the Constitutional Convention of New York. (53 pp.) 25 cents.   | 67. NOVEMBER—Part I: The Standardisation of Public Employments—An Interpretation. (121 pp.) \$1.00.   |
| 59. MARCH—Financial Problems of the City of New York; the "Pay-As-You-Go" Plan, Etc. (70 pp.) 75 cents.   | 68. DECEMBER—Training for Municipal Service. (51 pp.) 50 cents.   |
| 60. APRIL—Condition of the New York State Sinking Funds—A Report to the Constitutional Convention. (39 pp.) 50 cents.   | 1916  |
| 61. MAY—Constitution and Government of the State of New York—An Appraisal. (250 pp.) \$1.00.  | 69. JANUARY — Responsible Government. (135 pp.) \$1.00.   |
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| 63. JULY—State Administration—Discussions of Proposed Amendments for the Reorganization of the Executive Branch Before the New York Constitutional Convention—Including Report of the Committee and Speech of Elihu Root. (190 pp.) \$1.00. | 71. MARCH—A National Program to Improve Methods of Government. (88 pp.) \$1.00.   |
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|   | 76. AUGUST—Part II: The Standardisation of Public Employments—Application. (128 pp.) \$1.00.  |
|   | 77. SEPTEMBER—Citizen Agencies for Research in Government. (118 pp.) \$1.00.  |

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## PREFATORY NOTE

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The movement in support of systematic training for public service is now so far advanced that the need of the hour is exact information respecting the nature and number of the government positions opening from time to time. To meet this practical demand the Training School for Public Service is preparing a series of studies in various lines of public service, particularly those attractive to men and women with college or professional training. This number of **MUNICIPAL RESEARCH**, prepared by Professor Frederick E. Breithut of the College of the City of New York, contains an introductory review of the whole field of engineering as a career and a picture of the engineering service of the government of the United States. A second part to be published immediately will cover the engineering service of the State and City of New York, the proposed standard specifications for engineering employments and will also present conclusions drawn by Dr. Breithut from his exhaustive investigation.

It is not necessary to point out that this study could have been prepared only as the result of long and painstaking inquiries conducted by the author in Washington. Neither is it necessary to say that such a report as this is worth a volume of generalities on "public service" or "engineering careers." If the whole field of professional service were covered in this way, teachers in colleges, professional and technical schools could speak with some assurance when their students ask about opportunities in the public service. Vocational guidance to be truly helpful must be based on accurate knowledge, and those interested in this pressing educational problem will no doubt feel grateful to Dr. Breithut for having presented such a clear and informing picture of "one corner of the field of public service," as he calls it.

CHARLES A. BEARD.

TRAINING SCHOOL FOR PUBLIC SERVICE  
November 13, 1916.

# THE ENGINEER IN PUBLIC SERVICE

## CHAPTER I

### INTRODUCTION

Every young man in deciding on a career naturally inquires as to the qualifications necessary to success and the opportunities offered in the several professions. There have been several attempts to appraise the qualities which should characterize the successful engineer. Dean William G. Raymond<sup>1</sup> believes that only those should enter the profession who possess honesty, ingenuity, energy, initiative, fondness for science and mathematics, business ability, and enjoyment of the work for the work's sake, rather than for the money.

Professor C. R. Mann<sup>2</sup> recently conducted an inquiry among members of the profession which resulted in evaluating the desirable qualities of an engineer as follows:

	<i>Per Cent</i>	
1— <i>Character, integrity, responsibility, resourcefulness, initiative</i>	24.0	} General—75%
2— <i>Judgment, common sense, scientific attitude, perspective</i>	19.5	
3— <i>Efficiency, thoroughness, accuracy, industry</i>	16.5	
4— <i>Understanding of men, executive ability</i>	15.0	
<hr/>		
5— <i>Knowledge of the fundamentals of engineering science</i>	15.0	} Technical—25%
6— <i>Technique of practice and of business</i>	10.0	
	<hr/> 100.0	

<sup>1</sup> *Bulletin of the State University of Iowa—University Extension Bulletin No. 3—April 11, 1914, "Engineering as a Profession."*

<sup>2</sup> *Bulletin of the Society for the Promotion of Engineering Education, Vol. VII, 1916.* Also quoted in *Engineering News*, Vol. 75, p. 1246. The point has been raised that the relative weights here given apply to the engineer who has already established a practice rather than to the young man just starting on his professional career. In the case of the latter, the proportion given to knowledge of fundamentals and technique should probably be much larger.

And Ernest McCullough<sup>1</sup> quotes Chief Engineer Sterling's Report to the Mississippi Levee Commissioners as containing the following specifications for a good engineer:

"A good engineer must be of inflexible integrity, sober, truthful, accurate, resolute, discreet, of cool and sound judgment, must have command of his temper, must have courage to resist and repel attempts at intimidation, a firmness that is proof against solicitation, flattery or improper bias of any kind, must take an interest in his work, must be energetic, quick to decide, prompt to act, must be fair and impartial as a judge on the bench, must have experience in his work and dealing with men, which implies some maturity of years, must have business habits and knowledge of accounts. Men who combine these qualities are not to be picked up every day. Still, they can be found. But they are greatly in demand and when found they are worth their price; rather they are beyond price and their value cannot be estimated by dollars."

#### *Practical Questions to be Answered*

Although such summaries of the qualifications requisite for success are undoubtedly useful in helping the young man to form a judgment about his own fitness for an engineering career, they are not as important to him as an actual knowledge of what he can probably hope to achieve should he cast his lot in that field. Of course, in many instances the young men do not know why they choose engineering unless it is because they have read some glowing articles in newspapers and magazines or have been brought under the spell of enthusiasts and commencement orators. But in this day of much heart-searching about vocational guidance an increasing number of students, in pondering over their careers, are asking such precise questions as the following:

What are the usual prospects in the engineering profession?

How do the compensations and rewards compare with those in other professions?

What is the usual rate of advancement?

What can a man normally expect to be earning by the time he reaches the age of thirty-five?

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<sup>1</sup> "Engineering as a Vocation," Ernest McCullough, published by the David Williams Company, 239 West 39th St., N. Y. City, 1911.

*Many Answers Are Indefinite*

Strange as it may seem, only a few attempts have been made to answer these questions, although it has been estimated that each year there are ten thousand young men who take up the engineering courses in our schools.<sup>1</sup> And such attempts as have been made are, with few exceptions, disappointing in results. Engineers, of all men, are supposed to be concrete and specific. As soon as they begin to discuss their profession, however, they seem to abandon their usual realistic methods and indulge in eloquent praises of their calling, which would make the average clergyman or politician turn green with envy. Even the work on "Engineering as a Vocation" by the matter-of-fact McCullough, is not free from this fault. Thus we read (p. 53) in a chapter headed "The Education of the Engineer," the following:

"The engineer changes the very face of nature. He makes millions of blades of grass grow where none grew before. He builds railroads which people the deserts. He erects factories and equips them. Thousands of people are employed through him"—and so on.

A more recent volume "Engineering as a Career—a Series of Papers by Eminent Engineers" is supposed to fill a long-felt want,—the one of which we are speaking. And yet, in this work, the same tendency is found toward rhetorical effusion. Thus in the first paper there is a passage which reads: "In the past the poets have sung of love and war. It has remained for the engineer to secure for the arts of peace the dominant position in civilization. The triumphs of transportation, of electric transmission and of power development have revolutionized the life of the race and caused during the last century, a greater advance toward the millennium than has occurred in any preceding thousand years." Then follows a quotation from Kipling.

The second paper in this highly interesting volume is entitled "Shall My Boy Become an Engineer?" It begins by telling us that:

<sup>1</sup> "Engineering as a Career," D. Van Nostrand Company, 1906, Preface p. iii.

<sup>2</sup> The Carnegie Foundation for the Advancement of Teaching, *Sixth Annual Report*, 1911. The Carnegie Foundation for the Advancement of Teaching found in 1906 records of the conferring of 2,766 degrees in engineering—1,786 bachelor of science in various kind of engineering, and 980 other, mostly higher, engineering degrees. In 1910 is found records of the conferring of 3,713 such degrees.



"Forty years ago there were no triple or quadruple expansion steam engines, no commercial oil or gas engines, no steam turbines, no dynamos—the compound steam engine was the highest developed form of motive power, and the world had been waiting thousands of years for that. Forty years ago the Atlantic cable was not yet prepared for continuous service, and there were no telephones, no phonographs, no electric lamps, no trolley cars, no automobiles, no aeroplanes, no wireless telegraphy."

Then follows a brief historical account of the achievements of the last four decades, something about the value of new ideas, a few paragraphs on the misunderstandings which frequently arise between the technically trained engineer and his less enlightened brother, some additional paragraphs on the need of engineers in manufacturing, in which the assurance is given that "the land, the sea and the air have been conquered, and the world has probably seen in these last forty years more diverse and remarkable inventions and discoveries than will ever again be seen in any future forty-year period in the world's history."

The final paragraph contains the only reference to the title of the article. It reads:

"The mechanical engineering profession is still in the very early morning of its life and it opens up to young men, who have a liking for mathematics and mechanics, and at the same time a cultivated and balanced mind, an assurance of a high and respected position in life."

This last assurance must console the anxious parent seeking advice on "Shall My Boy Become an Engineer?"

It would be useless to continue an analysis of the remainder of the book. Much of it is excellent and to the point, but, on the whole, it is not definite or concrete enough to aid either the young man about to decide whether he wants to study engineering or not, or the young engineering graduate who is wondering about his future.

The glittering prospects frequently pictured by less responsible writers in newspapers and popular magazines can safely be dismissed. Articles of this type, being usually based on guesswork or imagination do not deserve serious consideration. They are unfair alike to the graduate, to his school and to the engineering profession at large. The young man who has been given inflated notions of his future, on coming face to face with the realities of every-day practice, is apt to grow discouraged, to

question his own ability, to lose faith in the idealistic elements of his vocation (and surely engineering has enough of these without the necessity of exaggerating them), and to look upon himself as a failure when, as a matter of fact, he may be doing fairly well.

#### *Results of Studies of Actual Conditions*

In turning from general works and magazines to special articles in technical publications we find a few helpful surveys. From the standpoint of financial return (though, of course, this is not everything) there have been several studies which are based on actual, concrete information.

The dean of one of the state universities in the Middle West undertook an inquiry as to the incomes earned by graduates from the university's engineering school.<sup>1</sup> The graduates were asked to give their income derived directly or indirectly from their work as engineers or contractors for each year since graduation up to the present time, so far as they were able to report their income in earlier years from memory or records.

The blank sent to be filled out was placed in a blank envelope which was inclosed in an outer addressed envelope so that those compiling the records could not identify the person reporting or even his locality. It is noteworthy that only half a dozen of the graduates reporting were members of the American Society of Civil Engineers.

Replies were received from 46.5 per cent of all the engineering graduates, and from these replies the statistics in the table on page 6 were compiled.

#### *An Approximate Equation to Determine Income*

Dean Benjamin<sup>2</sup> has made a report on a study of the graduates of the Schools of Engineering, Civil, Electrical and Mechanical, of Purdue University in which he gives tables and charts curves showing results for the classes of 1899, 1904 and 1909. Generally speaking, the incomes at the end of fifteen years for all engineers range from \$2,000 to \$4,000 with an average of about \$3,500. The incomes at the end of ten years lie for the most part between \$1,500 and \$3,500 per year with an average of about

<sup>1</sup> *Engineering News*, Vol. 74, page 805, September 9, 1915. Until 1905, the engineering instruction in the university in question was given by a department of civil engineering, but in that year a separate college of engineering was organized.

<sup>2</sup> "Incomes of Engineering Graduates," C. H. Benjamin, Dean, Schools of Engineering, Purdue University, in *Engineering Education*, VI, 582, April, 1916.

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INCOME STATISTICS OF GRADUATES IN ENGINEERING FROM  
A WESTERN STATE UNIVERSITY

YEARS OUT OF COLLEGE	NUMBER REPORTING	HIGHEST INCOME	LOWEST INCOME	AVERAGE INCOME	PER CENT	
					ABOVE AVERAGE	BELOW AVERAGE
1	166	\$4,000	\$150	\$884	40	60
2	152	7,000	400	1,115	28	72
3	136	4,000	300	1,225	34	66
4	119	4,500	600	1,379	31	69
5	94	5,000	420	1,498	32	68
6	80	4,000	600	1,596	48	52
7	73	3,400	720	1,697	48	52
8	63	5,000	650	1,788	47	53
9	53	7,000	840	1,996	38	62
10	50	8,300	1,020	2,296	30	70
11	43	10,300	800	2,530	28	72
12	34	13,200	800	2,819	26	74
13	35	20,000	900	3,127	21	79
14	30	40,000	900	3,927	13	87
15	31	33,000	1,000	3,894	13	87
16	28	21,800	800	4,252	11	89
17	25	27,500	*	3,440	16	84
18	23	37,000	1,000	4,671	13	87
19	21	27,000	1,500	4,663	19	81
20	17	23,000	2,000	5,946	24	76
21	17	33,000	2,100	7,734	29	71
22	16	42,500	2,100	8,008	19	81
23	16	46,000	2,000	7,687	25	75
24	13	33,500	2,100	8,172	23	77
25	10	14,800	2,100	4,630	30	70
26	7	13,500	2,100	4,671	14	86
27	5	19,700	1,500	6,340	20	80
28	5	22,500	1,500	6,980	20	80
29	3	4,200	3,000	3,567	33	67
30	3	4,500	3,000	3,833	67	33
31	3	4,500	3,000	4,075	75	25
32	3	4,500	3,700	3,983	33	67
33	2	5,000	3,700	4,350	50	50
34	1	5,000	5,000	5,000	0	0
35	1	5,000	5,000	5,000	0	0

\* Indefinite loss reported for this year.

\$2,500. The incomes at the end of five years are mainly included between \$1,000 and \$2,000 per annum, with an average of about \$1,600. The results indicated a possible equation, as follows:

“The salaries of engineering graduates of this University are improving from year to year and for the five years, 1909-14, the line of progress may be approximately represented by the equation—

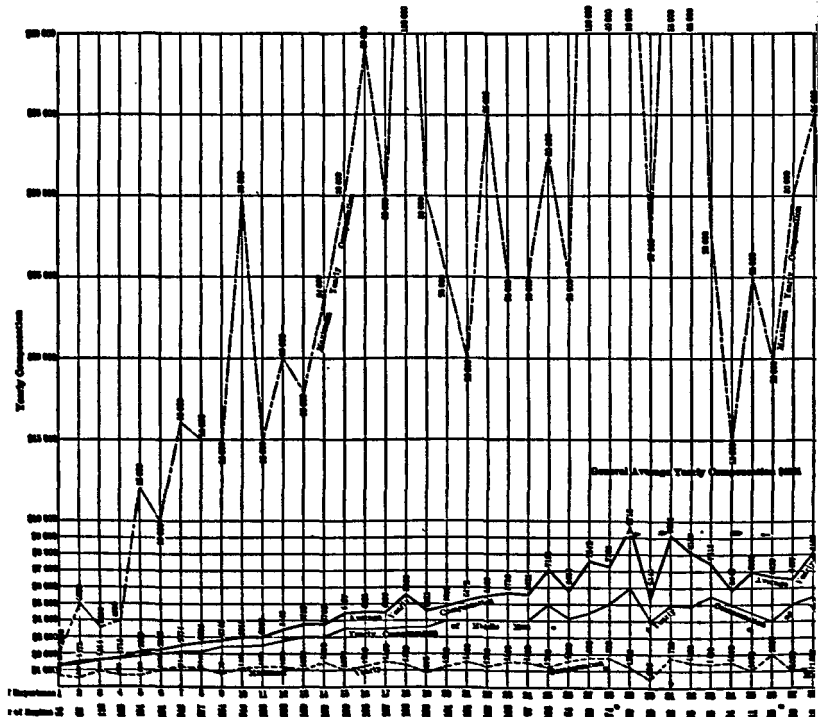


Fig. 1.

$$y = 600 + 170x$$

where—  
 $y$  = salary for any year  
 and—  
 $x$  = number of years since graduation."

#### *Reports of Committee of American Society of Civil Engineers*

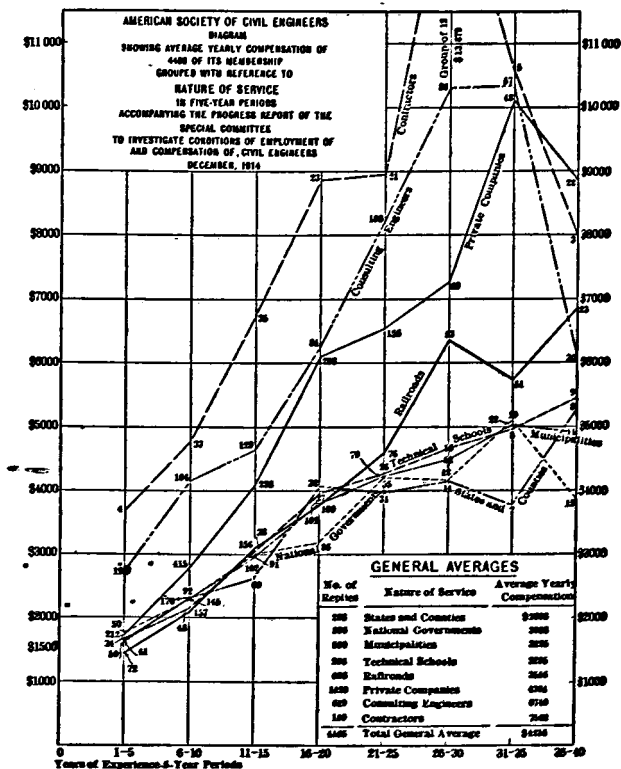
Probably the studies of this subject which have aroused most interest and discussion have been the two reports of the special committee of the American Society of Civil Engineers "to investigate the conditions of employment of and compensation of civil engineers." The first report was presented at the annual meeting of the American Society of Civil Engineers, January 21, 1914; the second is contained in the Proceedings of the American Society of Civil Engineers for December, 1914 (Vol. XL, No. 10). The first report was based on 3,638 replies to a circular sent to 6,850 members. These replies indicated that the average compensation of an engineer for the first year of his professional life is \$1,300; at the end of 5 years, \$2,000; 11 years, \$3,000; 15 years, \$4,000; 21 years, \$5,000; 25 years, over \$6,000; and between the twenty-seventh and thirty-third years of practice, the average is \$7,500. After this period, the rate of compensation gradually decreases, remaining, however, about \$6,000 up to the forty-fifth year. From that point on the data have no value. The general average compensation for the 3,638 members is \$4,325; the average yearly compensation of the 1,792 who replied who belonged in the first fifteen-year period, is \$2,827. Twenty-five per cent of the total were non-graduates.

Following this first report, a "second circular was sent out, to which 1,240 replies were received; of these 1,158 gave information which could be availed of, bringing the total number of usable replies to 4,796, which is two-thirds of the entire membership of the Society at the time the second circular was mailed."

The accompanying diagrams (Figs. 1, 2, 3 and 4) are reproduced by permission.<sup>1</sup> They are largely self-explanatory. Figure 1 shows the average yearly compensation, the maximum, the minimum and that of the middle man, plotted against the years of experience. It will be seen that the results correspond quite closely with those published in the first report.

<sup>1</sup> It is a pleasure to thank Dr. Charles Warren Hunt for his kind aid in this part of the work.

Figure 2 shows the variation of compensation with the character of employment, indicating the average compensation paid by the national government, states, municipalities, technical schools, railroads, and private corporations and companies, as well as the incomes of consulting engineers and engineering contractors grouped in five-year periods.



INTRODUCTION

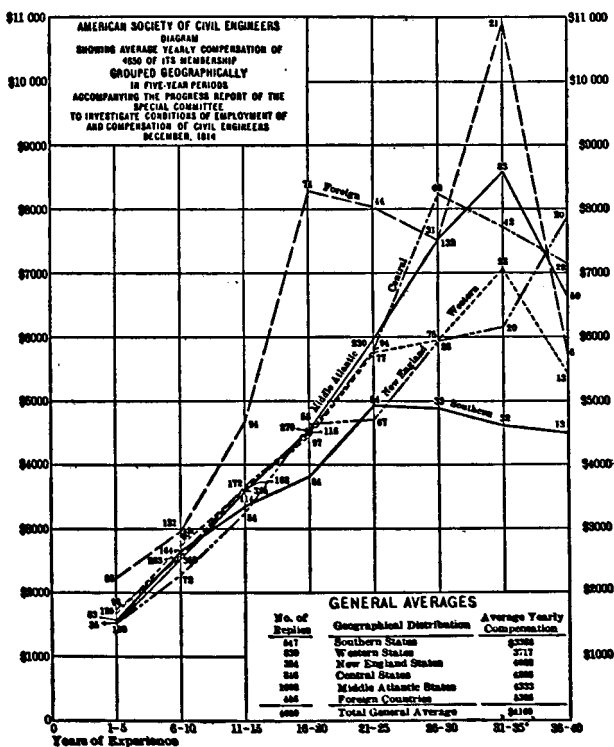


FIG. 2.

Analysis of Data

These data show that the salaries paid by the national government, states, cities and technical schools (including in the last, receipts from private practice) while closely corresponding with those paid by railroad companies during the first 20 years, are materially less after that period; that other corporations and private companies pay considerably higher salaries, and that the

**THE ENGINEER IN PUBLIC SERVICE**

largest incomes are those of consulting and contracting engineers. The facts presented in this table are interesting also in that they enable us to form some idea of the relative numbers of men engaged in the various engineering services. Re-arranged and expressed as percentages these are as follows:

NATURE OF SERVICE	PER CENT	
States and Counties	6.4	} 30.9% in public service
National Governments	11.3	
Municipalities	13.2	
Technical Schools	4.6	
Railroads	15.4	
Private Companies	32.0	
Consulting Engineers	13.9	
Contractors	3.1	

In this connection it may be of interest to note that Mr. Onward Bates, President of the American Society of Civil Engineers in 1907, in his presidential address of that year, classified the active members of the Society as follows:

United States Government Service	7.7 per cent
State and Municipal Service	12.7 "
Railway service (all kinds)	15.2 "
Manufacturing, contracting, etc.	17.6 "
Consulting engineers	20.2 "
Architects, teachers, editors, miscellaneous	5.1 "
Unclassified	21.5 "

Figure 3 shows the general averages arranged according to geographical distribution. The results are so obvious that they call for no comment.

Figure 4 shows the relative compensation received by engineers who are graduates of technical schools and those who are not. These curves follow each other very closely for the first 15 years, the non-graduate appearing to have a slight advantage during this period. "The average yearly compensation of 1,998 graduates having an experience of from 2 to 15 years is \$2,756. The average yearly compensation of 614 non-graduates of the same length of time is \$3,154." After this, the graduate has the advantage until about the forty-fifth year, when the curves come together again. "The average yearly compensation of 1,394 graduates having an experience of from 16 to 50 years is \$6,328; of 719 non-graduates \$5,359." The average age of the non-graduates was slightly less than that of the graduates.



INTRODUCTION

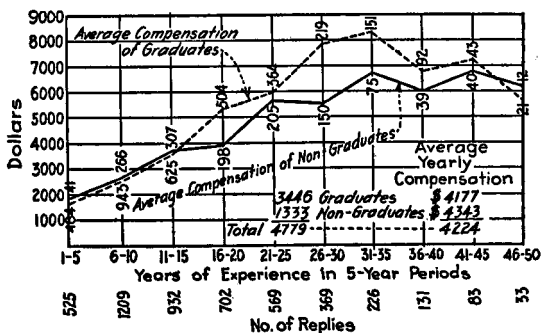


FIG. 4.

*Discussion Aroused by Committee Report*

As has been stated above, these reports have aroused considerable discussion. The majority of those who contributed to the discussion expressed the belief that the statistics should include all engineers who could be reached and should not be confined to the members of the society. There can be no question that the members of the society are the relatively more successful members of the civil engineering profession.<sup>1</sup> On this point the report says, "in order to meet the evident desire of many members of the Society for statistics which will include those outside its membership, the Committee proposes to endeavor to secure such information and to make a further classification based on actual age as well as the number of years in engineering practice, while it is also proposed to secure information indicating the proportion of time when engineers are out of employment."

One writer<sup>2</sup> is of the opinion that the compensations reported are too high and he believes that most other engineers will agree with him. He states:

"It is known that the minimum wage of a technical graduate of one year's experience is \$360 per year; that \$720 per

<sup>1</sup> The total number of engineers enrolled in the four national engineering societies—civil, electrical, mechanical and mining—was about 20,000 at the time of the report. (*Proceedings, American Society of Civil Engineers, February, 1914, XL, 397.*)

<sup>2</sup> *Proceedings, American Society of Civil Engineers, February, 1914, XL, 397.*

year is considered a good job, and that \$1,200 per year is an exceptionally good position.

"The conditions after 20 years' experience can be analyzed similarly. The lowest wage known to the writer for this term of service is \$900. *An engineer is considered by his collaborators as a success if he receives a salary of \$5,000<sup>2</sup> and as very successful if he receives a salary of \$5,000.* The average shown by the diagram is \$4,941, *which is at least 50 per cent higher<sup>1</sup> than the salary of the average engineer of 20 years' experience.*"

A. I. Stiles, continuing the discussion in the *Proceedings* for April, 1914, states that "The discussions of the Committee both in the *Proceedings* of the Society and the technical press,<sup>2</sup> seem to indicate a practically unanimous opinion that *its figures and conclusions are far too optimistic.*<sup>1</sup> This view is supported by the writer's own experience."

The further discussion is contained in the *Proceedings* for May and October, 1914. Opinions are expressed that if curves had been prepared which excluded the upper and the lower 5 per cent, or the upper and the lower 10 per cent, the result would have been more nearly representative of the average compensation of civil engineers. It is also stated that if those who failed to respond had been heard from, the average would have been lower. Another suggestion is that if all professional incomes of more than \$15,000 a year had been excluded, the result would have more nearly represented actual conditions.

Dean Raymond,<sup>3</sup> in commenting on the results of the committee says:

"These figures shows plainly the different earning abilities of different individuals in the same profession and indicate also something of the percentage of engineers who may be considered as peculiarly successful financially. While the report is not definite in this particular, there is reason to believe from the figures that are given that less than 2 per cent, possibly less than 1½ per cent of all those reporting, receive \$10,000 or more for purely professional service. They also show that *the engineering profession is one in which any competent man can earn a good living, but not one in which the average man will earn more than this.*"<sup>1</sup>

<sup>1</sup> Italics are the writer's.

<sup>2</sup> See: *Engineering News*, Vol. 74, pages 325, 505 and 613; *Engineering Record*, Vol. 71, pages 139 and 804; *Engineer and Contractor*, Vol. 44, page 117; *Engineering*, Vol. 73, page. 34.

<sup>3</sup> *Loc. cit.*

This view seems to coincide with that of most engineers. It is a fact that averages show little of value. The \$150,000 men are not sufficient in number to justify their inclusion in a table. Nor are the \$900 men (though more numerous) to be taken as representative. Then again, one must remember the conflicting elements which enter into the problem. It can hardly be questioned that the more successful men would be more likely to answer. Again men are but human and pride in their profession and in their alma mater would not predispose them to place the least rosy color on their answers.

Probably the statement of the writer quoted above that "an engineer is considered by his collaborators as a success if he receives a salary of \$3,000, and as very successful if he receives a salary of \$5,000," is a rough statement of the general feeling of most members of the profession. At any rate, it would probably be the answer of any ordinary every-day practicing engineer of good ability, who is regarded by his colleagues as doing fairly well. He would also add, in all probability, that the man who clears \$3,000 year after year is above the average.

*Earnings of Engineers in Public Service May be Accurately Ascertained*

This discussion has been gone into at such length because it is essential to a correct judgment of the problem before us in this publication. In the field of public service, however, we have one great advantage in judging compensations. The salaries of engineers in the public service can be easily and reliably ascertained. The figures contained in public documents furnish precisely the information we are seeking. The payrolls of private corporations are not open to the scrutiny of the private investigator. The statements of individual members of the profession are capable of various interpretations. Among other things, it is questionable whether such returns refer to gross income or net income after rent, assistants' salaries, office costs and other expenses have been deducted. Such data are capable of being shaded toward the favorable side. The important question is not how much a man makes, but how much he clears.

Returning to the young engineering graduate with whom we began, we ought to be able to tell him exactly the status and compensation of the engineers at present in the employ of our governments, federal, state and municipal. From these data he should be able to predicate the probable returns to a man enter-

ing the public service. In other words, we should be able to answer somewhat definitely the following questions:

Is there a career in engineering in the public service?

What are the relative advantages and disadvantages of public service as compared with private?

Is public service in engineering a useful stepping-stone, giving valuable experience, no matter what field the engineer eventually enters?

But before we can answer these vital questions, it is essential as a preliminary step, to make a complete survey of the entire field of public service as it exists at present.<sup>1</sup>

Each vocation and profession must be studied in turn and its relationship to the whole established. The task is a big one. It involves painstaking application and a reverence for fact to the exclusion of fancy.

Taking the engineering profession as an example, we must know:

- 1—The numbers and salaries of each class of engineers in the service of our governments—national, state and municipal
- 2—The nature of the work they are called upon to do
- 3—The qualifications usually called for
- 4—The training best adapted to fit men for public service, and the best manner of giving such training<sup>2</sup>
- 5—The likely number of appointments
- 6—The rate of advancement and maximum return of the public servant
- 7—The proposed schemes, if any, of appraisal and standardization of engineering positions

This work endeavors to furnish an answer to our need for such information by presenting the facts as they exist.

<sup>1</sup> For a survey of the City of New York, see MUNICIPAL RESEARCH No. 68, December, 1915.

<sup>2</sup> See "Training for Public Service," *Engineering Record*, April 11, 1914, Vol. 69, page 417, Dean Herman G. Schneider.

## CHAPTER II

### THE ENGINEER IN THE SERVICE OF THE UNITED STATES GOVERNMENT

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In dealing with the problem of the engineer in the service of the United States government, it is almost needless to remark that only technical engineers (i.e., civil, mechanical, electrical, chemical and other related engineers) are meant. Stationary engineers (so-called), enginemen, locomotive engineers and many others doing similar work are not included.

One of the difficulties of making a survey of the engineering service is the great confusion which exists with regard to titles. Different titles often mean the same thing and the same title may mean different things.<sup>1</sup> Not only that, but sometimes a man is classified as a clerk who is actually doing work of an engineering nature. On the other hand, men of engineering training are engaged in other governmental activities. This publication treats only of those who are actually engaged in the officially recognized technical engineering work of the government departments.

Many of the engineering positions in the Department of War are filled by graduates of West Point. Since these positions are not open to civilians and, therefore, offer no opportunities to civilians, they have been omitted. The same limitation applies to many of the engineering positions in the Department of the Navy. These are filled exclusively by graduates of Annapolis and they have been omitted on that account.

The only engineering position in the Panama Canal service that is filled through competitive civil service examination, is that of draftsman. All other positions, such as rodman, levelman, transitman, instrumentman, junior engineer, etc., are exempted from examination. However, promotions from the lower grade positions, such as from rodman to levelman, or levelman to transitman, are made as a result of examinations

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<sup>1</sup> The title, "Marine Engineer," for example, may mean a designer of marine engines or it may mean a launch engineman. The Department of Commerce employs "Marine Engineers" at salaries ranging from \$40 per month to \$1,800 per annum. Marine engineers have been omitted from our discussion.

held by a local board of examiners at Panama. But, the facts regarding the Panama Canal service are not readily obtainable and the service is of a rather unusual nature. For these reasons, the Panama Canal service has been omitted from this discussion.

All positions paying less than \$900 per annum, or its equivalent (\$75 per month, or \$3 per day, counting 300 working days to the year) have also been omitted.<sup>1</sup>

Within the limits stated there were, on or about September 1, 1916, 2,253 engineering positions in the federal service, to which the engineering graduate might aspire.

*Tables Giving Data Regarding the Federal Service*

In order to form a picture of the engineering service of the United States government as at present constituted, the following tables were prepared:

TABLE I shows the number of engineering positions under each title in each department and the total number for each title and for each department. By reading from left to right, the total number for each title is obtained and by reading from top to bottom, the total number for each department.

There are 165 distinct titles of engineering positions in the list.

In compiling this table, the following departments were considered:

Executive Departments	}	State
		Treasury
		War
		Justice
		Post Office
		Navy
		Interior
		Agriculture
		Commerce
		Labor
		Interstate Commerce Commission
Other Government Establishments	}	Civil Service Commission
		Federal Reserve Board
		Federal Trade Commission
		Smithsonian Institution
		Government Printing Office (The Public Printer)

Of these, the Department of State,<sup>2</sup> the Department of Justice, the Federal Reserve Board, the Federal Trade Commission

<sup>1</sup> For example, the Interstate Commerce Commission employs 58 rodmen and chainmen at \$840 per annum, and 106 at \$720.

<sup>2</sup> There are a few engineers employed on International Boundary Commissions under the jurisdiction of the Department of State.

and the Smithsonian Institution employ no engineers in the sense in which the term is here used.

TABLE II contains a summary giving the titles, numbers and individual salaries for the whole service as covered above.

TABLE III gives the number of engineers employed in each department (arranged by bureaus where this information could be readily obtained).

TABLE IV contains a summary giving the numbers in the whole service covered at each rate of pay and the total salaries at each rate.

This table shows that the government is paying \$3,921,921 per annum in salaries for its engineering service within the limits stated above. Summarizing the data given in TABLE IV and rearranging in terms of salary, number and percentages, we obtain the following:

SALARY	NUMBER	PER CENT
\$ 900-\$1,000	185	8.2
1,001- 1,500	970	43.1
1,501- 2,000	505	22.4
2,001- 2,500	347	15.2
2,501- 3,000	136	6.3
3,001- 3,500	26	1.2
3,501- 4,000	59	2.5
4,001- 7,500	25	1.1
<b>TOTAL</b>	<b>2,253</b>	<b>100.0</b>

It will be seen that about 80 per cent of these salaries lie in the region between \$1,000 and \$2,500.

If we adopt a salary of \$3,000 or over as a fair measure of the "successful" engineer (as indicated in Chapter I, page 13), we find the following:

SALARY	NUMBER	PER CENT
Below \$3,000	2,058	91.3
\$3,000 or over	195	8.7
<b>TOTAL</b>	<b>2,253</b>	<b>100.0</b>

In 1905, John F. Hayford,<sup>1</sup> using \$700 as a minimum and omitting West Point, Annapolis and Panama Canal engineers, estimated that there were 2,600<sup>2</sup> opportunities for engineering graduates in the federal service. The salary ranges were:

\$ 700-\$1,400	46 per cent
1,500- 1,900	32 "
2,000- 2,900	18 "
3,000- 3,900	3 "
4,000 or over	1 "

*Tables Giving Number of Appointments and Qualifications Required, 1911-1915*

Having completed the picture of the present constitution of the federal engineering service, the next questions before us are those of the probable number of vacancies and the qualifications usually called for in filling these positions.

TABLE V shows the number of appointments made to engineering positions during the years 1911-1915.

TABLE VI shows the number of appointments of draftsmen for the same period.

TABLE VII contains a summary of the engineering examinations of the last five years, giving the title, qualifications, relative weights, content of examinations and weights of subjects, and salaries.

TABLE VIII gives similar data for the drafting positions.

Most of the conclusions to be drawn from these tables are so obvious that they call for little or no comment. What little discussion is necessary and the conclusions to be drawn will be found in Chapter VI, Part II.

A word should be said regarding the sources of the data embodied in the tabulations here presented.

It might naturally be assumed that some central agency at Washington (preferably the Civil Service Commission) would have all the material here presented, arranged in convenient

<sup>1</sup> *Proceedings of the Society for the Promotion of Engineering Education*, Vol. XIII, 1905, "Opportunities for Engineering Graduates in the Government Service."

<sup>2</sup> This number is probably too high.



form, for the information of those who are interested. Such is not the case.

The biennial *Official Register* (the so-called "Blue Book") is the nearest approach to a document which contains the necessary matter for the student of civil service affairs. Unfortunately this work is out of date before it is printed. And it is arranged in a manner that defeats the very object for which it is intended. There are 785 pages of the issue of 1915 containing the names of all government employes, arranged in alphabetical order and followed by abbreviations and symbols explained at the beginning of the work. A perusal of a page of this book will reveal the futility of trying to gain from it the information sought.<sup>1</sup>

The "Estimate of Appropriations" and the "Digest" contain specific information with regard to positions and salaries in some departments. But in others, in those notably in which "lump sum" or "blanket" appropriations are made, it is quite impossible to find material which would be of use in this connection.

Having found that the necessary data were not available in convenient form, appeal was made to that ever-ready servitor of the citizen in distress—a Member of Congress. The Hon. Joseph V. Flynn, Member of Congress from the Third District of New York, had the great kindness to send out a circular letter<sup>2</sup> to the executive departments and other government establishments, enumerated above, requesting the needed information.

TABLES I, II, III, and IV are based on the replies to this letter. These replies were signed either by the secretary of the department or someone in authority directly designated by him. It can therefore be stated that the information is up-to-date, reliable and authoritative.<sup>3</sup> It is a pleasure to acknowledge, with thanks, the assistance of Mr. Flynn, and our indebtedness to Mr. John T. Doyle, Secretary of the United States Civil Service Commission, for valuable aid generously given.

TABLES V and VI were compiled from the annual reports

<sup>1</sup> In justice to the United States Civil Service Commission and the Census Bureau, it should be stated that both these governmental agencies have repeatedly asked that they be allowed to arrange the material contained in the "Blue Book" in a more useful manner but their requests have been ignored.

A list of official registers and directories published by the United States government is given in Appendix A.

<sup>2</sup> Date: July 28, 1916.

<sup>3</sup> Most of the replies were received about September 1, 1916.

of the United States Civil Service Commission for the fiscal years 1911-1915.

Tables VII and VIII were compiled from the examination announcements of the United States Civil Service Commission for the last five years.

*Preliminary Comment on Tables I to VIII.*

A few general matters should be cleared up.

In the first place, little concerning the future can be predicated. The probabilities of examinations cannot be foretold. As elsewhere, everything in the federal service depends on the appropriations. The creation, for example, of the Interstate Commerce Commission meant the recruiting of a staff of over seven hundred engineers. The passage of the recent naval appropriations act will necessitate the employment of a large number of engineers.

There have been no attempts to appraise or to standardize the positions in the federal civil service in the sense in which New York State, New York City, Chicago and several other cities have recently attempted standardization work.<sup>1</sup> This is merely stated as a fact. To enter into the discussion of the content of such standards, or even their desirability, is entirely apart from the objects of this publication. It does seem, however, as if some of the difficulties mentioned, arising from non-descript titles, might easily be obviated. As things are, it is often difficult to judge the nature of a man's work by his title. Congress frequently makes appropriations for employes with technical qualifications under the designation of clerk.

There are no prescribed qualifications except as occasion arises, to hold examinations for filling particular positions.

There is no salary plan.

There is no fixed rate of advancement.

There is no promotion plan. Each department has its own system. "Some departments conduct competitive promotion examinations for certain positions, the standing of the successful competitors being considered in making promotions. In most departments the promotion is based on efficiency ratings, these

<sup>1</sup> In 1913, a standardization study of the employes in the Customs Service under the then collector of the Port of New York, John Furroy Mitchel, was made, under the direction of Dr. Frederick A. Cleveland, in cooperation with the Collector and the Secretary of the Treasury.

ratings being given by officers having knowledge of the employe's work."<sup>1</sup>

Finally, attention is again called to the fact stated above that the general discussion of the data presented in this chapter and the conclusions reached are contained in Chapter VI, in Part II.

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<sup>1</sup> Quoted from a letter of Mr. John T. Doyle, Secretary, U. S. Civil Service Commission, dated September 20, 1916.

TABLE I

NUMBER OF ENGINEERING POSITIONS UNDER EACH TITLE IN EACH DEPARTMENT OF THE UNITED STATES GOVERNMENT

	TREASURY	WAR	POST OFFICE	NAVY	INTERIOR	AGRICULTURE	COMMERCE	LABOR	INTERSTATE COMM.	CIVIL SERVICE COM.	PUBLIC PRINTER	TOTAL
Acting Chief Geographer . . . . .					1							1
Aeronautical Mechanical Engineer . . . . .		1										1
Apprentice Electrical Engineer . . . . .					1							1
Asst. Chief Engineer . . . . .					1	1						2
Asst. District Engineer . . . . .									5			5
Asst. Drainage Engineer . . . . .						1						1
Asst. Electrical Engineer . . . . .		7			2							9
Asst. Engineer . . . . .		11	10		91	2		8				122
Asst. Engineer, in Forest Products . . . . .						10						10
Asst. Engineer (Fuel) . . . . .					6							6
Asst. Engineer (Hydraulic) . . . . .					20							20
Asst. Explosive Engineer . . . . .					1							1
Asst. Engineer and Superintendent of Construction . . . . .		1										1
Asst. Hydraulic Engineer . . . . .					4							4
Asst. to Inspector . . . . .				1								1
Asst. Irrigation Engineer . . . . .						9						9
Asst. Mechanical Engineer . . . . .						3						3
Asst. Metallurgical Engineer . . . . .					1							1
Asst. Mining Engineer . . . . .					9							9
Asst. Petroleum Engineer . . . . .					2							2

THE ENGINEER IN PUBLIC SERVICE

Asst. Testing Engineer					1							1
Asst. Topographers				45								45
Associate Mechanical Engineer					1							1
Axeman				2								2
Bridge Engineer				1	1							2
Cable Engineer		2										2
Captain of Engineers	6											6
Chainman				4								4
Chemical Engineer				1	1							2
Chief of Construction				1	1							2
Chief of Drainage Investigations					1							1
Chief Electrical Engineer	1			1								2
Chief Engineer				1	2	1			2			6
Chief Hydraulic Engineer					1							1
Chief of Irrigation Investigations						1						1
Chief of Maintenance						1						1
Chief Mechanical Engineer					1							1
Chief Mining Engineer					1							1
Chief of National Park and Forest Roads						1						1
Chief Subinspector				1								1
Civil Engineer	1	4			6	5	45	1				62
Civil Engineer (Superintendent of Construction)		26										26
Civil, Mechanical, Electrical and Heating Engineer (Superintendent of Construction)					1							1
Constructing and Electrical Engineer					1							1
Constructor for Engineering	1											1
Consulting Chemical Engineer					2							2
Consulting Electrical Engineer					2							2
Consulting Engineer	1				21							22
Consulting Petroleum Engineer					2							2
Consulting Metallurgical Engineer					1							1
Dairy Engineer						1						1
District Draftsman					1							1
District Engineer					5	2			5			12
Draftsman					15							15

IN THE SERVICE OF THE U. S. GOVERNMENT

TABLE I—Continued

	TEASURY	WAR	POST OFFICE	NAVY	INTERIOR	AGRICULTURE	COMMERCE	LABOR	INTERSTATE COMM.	CIVIL SERVICE COM.	PUBLIC PRINTER	TOTAL
Drainage Engineer . . . . .	..	..	..	..	..	19	..	..	..	..	..	19
Dredge Engineer . . . . .	..	..	..	..	24	..	..	..	..	..	..	24
Electrical Assistant . . . . .	..	7	..	..	..	..	..	..	..	..	..	7
Electrical Engineer . . . . .	8	13	..	..	4	..	10	..	..	..	..	35
Electrical Engineer and Draftsman . . . . .	..	..	..	..	..	1	..	..	..	..	..	1
Electrical Engineer (Detailed to Secretary) . . . . .	..	..	..	..	..	1	..	..	..	..	..	1
Electrical and Mechanical Engineer . . . . .	..	3	..	..	..	..	..	..	..	..	..	3
Electrical and Mechanical Expert Aids . . . . .	..	..	..	3	..	..	..	..	..	..	..	3
Electrical Expert Aid . . . . .	..	..	..	9	..	..	..	..	..	..	..	9
Electrical Expert Aid (Ship) . . . . .	..	..	..	11	..	..	..	..	..	..	..	11
Electrical Inspector . . . . .	..	..	..	1	..	..	..	..	..	..	..	1
Electricians . . . . .	..	..	..	..	13	..	..	..	..	..	..	13
Engineer . . . . .	..	1	1	..	49	1	..	1	..	2	1	56
Engineer in Chief . . . . .	1	..	..	..	..	..	..	..	..	..	..	1
Engineer and Electrician . . . . .	..	..	..	..	1	..	..	1	..	..	..	2
Engineer in Forest Products . . . . .	..	..	..	..	..	13	..	..	..	..	..	13
Engineer in Charge of Grain Dust Explosive Investigations . . . . .	..	..	..	..	..	1	..	..	..	..	..	1
Engineer (Fuel) . . . . .	..	..	..	..	7	..	..	..	..	..	..	7
Engineer (Hydraulic) . . . . .	..	..	..	..	4	..	..	..	..	..	..	4
Engineer and Mechanic . . . . .	..	1	..	..	..	..	..	..	..	..	..	1
Engineer (Mechanical) . . . . .	..	..	..	..	1	..	..	..	..	..	..	1
Engineer of Mine Safety Investigations . . . . .	..	..	..	..	1	..	..	..	..	..	..	1
Engineer (Mining) . . . . .	..	..	..	..	2	..	..	..	..	..	..	2
Engineer of Tests . . . . .	..	..	..	..	..	1	..	..	..	..	..	1

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Engineer (Timber Testing)					1															1
Engineering Aids			2																	2
Engineering Expert Aids			1																	1
Estimator					5															5
Expert Aids			3																	3
Expert Electrical Aids			3																	3
Expert Radio Aids			14																	14
Expert in Wireless Telegraphy			1																	1
Explosive Engineer						1														1
First Assistant Engineer																				28
First Lieutenant of Engineers	28																			146
Foreman					146															2
Gas Engineer					1															7
Geographer					7															1
Highway Bridge Engineer						1														13
Highway Engineer							13													12
Hydraulic Engineer						12														1
Hydraulic and Sanitary Engineer		1																		4
Hydro Electrical Engineer																				1
Hydrographic Engineer					1															6
Hydrographic Surveyor					6															
Inspector of Aeroplanes and Aeroplane Motors		14																		14
Instrumentman					4		26													30
Instrumentman and Inspector					1															1
Irrigation Engineer																				17
Junior Drainage Engineer																				2
Junior Electrical Engineer							3													10
Junior Engineer																				447
Junior Engineer (Fuel)		6					92													5
Junior Explosive Engineer							5													6
Junior Highway Engineer							6													17
Junior Mechanical Engineer																				20
Junior Signal Engineer																				9
Junior Structural Engineer																				47
Junior Telegraph and Telephone Engineer																				9

IN THE SERVICE OF THE U. S. GOVERNMENT

TABLE I—Concluded

	TREASURY	WAR	POST OFFICE	NAVY	INTERIOR	AGRICULTURE	COMMERCE	LABOR	INTERSTATE COMM.	CIVIL SERVICE COM.	PUBLIC PRINTER	TOTAL
Junior Topographer .....	..	..	..	..	25	..	..	..	..	..	..	25
Levelman .....	..	..	..	..	4	..	..	..	..	..	..	4
Logging Engineer .....	..	..	..	..	..	5	..	..	..	..	..	5
Mechanical, Electrical and Heating Engineer (Superintendent of Construction) ..	..	..	..	..	1	..	..	..	..	..	..	1
Mechanical Engineer .....	..	5	..	4	1	1	1	..	..	..	..	12
Mechanical Superintendent .....	..	..	..	..	1	..	..	..	..	..	..	1
Mechanical Superintendent (Mechanical and Electrical Engineer) .....	..	..	..	..	1	..	..	..	..	..	..	1
Members of Engineering Board .....	..	..	..	..	..	..	..	..	5	..	..	5
Metallurgical Engineer .....	..	1	..	..	4	..	..	..	..	..	..	5
Metallographist .....	..	1	..	..	..	..	..	..	..	..	..	1
Mine Safety Engineer .....	..	..	..	..	1	..	..	..	..	..	..	1
Mine Sanitary Engineer .....	..	..	..	..	1	..	..	..	..	..	..	1
Mining Engineer .....	..	..	..	..	6	..	..	..	..	..	..	6
Municipal Engineer .....	..	..	..	..	1	..	..	..	..	..	..	1
Petroleum Engineer .....	..	..	..	..	1	..	..	..	..	..	..	1
Pilot and Gas Engineer .....	..	..	..	..	..	1	..	..	..	..	..	1
Pulp and Paper Engineer .....	..	..	..	..	..	1	..	..	..	..	..	1
Radio Engineer .....	..	1	..	..	..	..	..	..	..	..	..	1
Resident Engineer .....	..	..	..	..	24	..	..	..	1	..	..	25
Road Engineer .....	..	..	..	..	..	1	..	..	..	..	..	1
Rodman .....	..	..	..	..	9	..	..	..	..	..	..	9
Rodman and Chairman .....	..	..	..	..	..	..	..	..	100	..	..	100
Sanitary Engineer .....	9	..	..	..	..	1	..	..	..	..	..	10

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THE ENGINEER IN PUBLIC SERVICE



Sanitary and Heating Engineer	..	1	..	..	..	..	..	..	..	..	..	1
Second Lieutenant Engineer	27	..	..	..	..	..	..	..	..	..	..	27
Senior Civil Engineer	..	..	..	..	..	..	..	95	..	..	..	95
Senior Drainage Engineer	..	..	..	..	9	..	..	..	..	..	..	9
Senior Electrical Engineer	..	..	..	..	..	..	..	5	..	..	..	5
Senior Engineer	..	..	..	..	..	..	1	..	..	..	..	1
Senior Highway Engineer	..	..	..	..	23	..	..	..	..	..	..	23
Senior Mechanical Engineer	..	..	..	..	..	..	..	12	..	..	..	12
Senior Signal Engineer	..	..	..	..	..	..	..	9	..	..	..	9
Senior Structural Engineer	..	..	..	..	..	..	..	16	..	..	..	16
Senior Telegraph and Telephone Engineer	..	..	..	..	..	..	..	9	..	..	..	9
Structural Engineer and Draftsman	15	..	..	..	..	..	..	..	..	..	..	15
Subinspector	..	..	..	1	..	..	..	..	..	..	..	1
Subinspector (Construction Work)	..	..	..	35	..	..	..	..	..	..	..	35
Subinspector and Draftsman	..	..	..	13	..	..	..	..	..	..	..	13
Subinspector (Dredging)	..	..	..	2	..	..	..	..	..	..	..	2
Subinspector (Electrical)	..	..	..	2	..	..	..	..	..	..	..	2
Subinspector and Superintendent of Construction	..	..	..	22	..	..	..	..	..	..	..	22
Superintendent of Construction	..	..	..	1	..	..	..	..	..	..	..	1
Superintendent of Road Construction	..	..	..	19	..	..	..	..	..	..	..	19
Surveyman	..	..	..	..	4	..	..	..	..	..	..	4
Surveyman and Subinspector	..	..	..	76	..	..	..	..	..	..	..	76
Supervising Engineer	..	1	..	1	..	..	..	..	..	..	..	1
Telephone Engineer	..	..	..	5	..	..	..	..	..	..	..	5
Third Lieutenant of Engineers	19	..	..	..	3	..	..	..	..	..	..	3
Topographical Engineer	..	..	..	45	..	..	..	..	..	..	..	45
Topographer	..	..	..	16	..	..	..	..	..	..	..	16
Townsite Engineer and Manager	..	..	..	1	..	..	..	..	..	..	..	1
Transitman	..	..	..	1	1	..	..	..	..	..	..	2
	115	110	11	145	909	187	56	15	702	2	1	Grand Total 2,253

THE ENGINEER IN PUBLIC SERVICE

TABLE II  
ENGINEERS AT PRESENT IN THE EMPLOY OF THE UNITED STATES  
GOVERNMENT

DEPARTMENT	TITLE	NUMBER	SALARIES		
<i>Treasury Department</i> Bureau of Public Health Service	Sanitary Engineer	9	6 @ \$166.66 p. m. 2 @ 208.33 " 1 @ 333.33 "		
		All Other Bureaus	Captain of Engineers	6 @ 3,000	
			Civil Engineer	1 @ 2,250	
All Other Bureaus	Constructor for Engineering	1 @ 3,000			
	Electrical Engineers	8	1 @ 1,550 1 @ 1,800 1 @ 1,700 2 @ 1,800 1 @ 2,400		
			1 @ 5.00 p. d. 1 @ 5.50		
		Engineer in Chief	1 @ 3,500		
		First Lieutenant of Engineers	28 @ 2,400		
		Second Lieutenant of Engineers	27 @ 2,000		
	Third Lieutenant of Engineers	19 @ 1,700			
	Structural Engineers and Drafts- men	15	1 @ 1,300		
			3 @ 1,600		
			9 @ 1,800		
			1 @ 2,000 1 @ 2,300		
	Total		115		
	<i>Department of War</i> Ordnance Department at Large	Metallurgical Engineer	1	1 @ \$2,000	
		Metalligraphist	1	1 @ 2,000	
		Quartermaster Corps of the Army	Assistant Engineer and Super- intendent of Construction	1	1 @ 1,800
Civil Engineer			4	3 @ 1,800 1 @ 2,000	
Civil Engineer and Super- intendent of Construction		26	3 @ 1,800 14 @ 1,800 5 @ 2,000 1 @ 2,400		
		Electrical Engineer	6	1 @ 900 1 @ 1,200 1 @ 1,500 1 @ 1,800 2 @ 2,000	
			Electrical and Mechanical Engi- neer	3	1 @ 1,800 1 @ 2,250 1 @ 2,400
Hydraulic and Sanitary Engi- neer				1	1 @ 2,000
Mechanical Engineers				3	1 @ 1,090 2 @ 1,200
		Sanitary and Heating Engineer Supervising Engineer	1	1 @ 1,800	
			1	1 @ 2,750	
Signal Service at Large		Aeronautical Mechanical Engi- neer	1	1 @ 2,400	

IN THE SERVICE OF THE U. S. GOVERNMENT

TABLE II—Continued

DEPARTMENT	TITLE	NUMBER	SALARIES	
<i>Department of War—Cont. Signal Service at Large</i>	Assistant Electrical Engineer	7	3 @ \$1,500 2 @ 1,600 1 @ 1,800 1 @ 2,700	
		2	1 @ 2,000 1 @ 3,600	
		1	1 @ 5,000	
		7	3 @ 1,300 1 @ 1,400 2 @ 1,500 1 @ 1,900	
	Cable Engineers	2	1 @ 2,000 1 @ 3,600	
		1	1 @ 5,000	
	Consulting Engineer	1	1 @ 5,000	
	Electrical Assistants	7	3 @ 1,300 1 @ 1,400 2 @ 1,500 1 @ 1,900	
		5	4 @ 1,800 1 @ 2,000	
	Electrical Engineers	5	4 @ 1,800 1 @ 2,000	
	Chief Electrical Engineer	1	1 @ 2,400	
	Inspector of Aeroplanes and Aeroplane Motors	14	2 @ 1,000 1 @ 1,500 6 @ 1,800 4 @ 2,400 1 @ 3,000	
		1	1 @ 2,400	
		Radio Engineer	1	1 @ 2,400
			1	1 @ 1,300
	<i>Medical Department at Large</i>	Engineer	1	1 @ 1,300
		Engineer and Mechanic	1	1 @ 1,300
		Mechanical Engineer	2	1 @ 1,400 1 @ 1,900
	<i>Engineering Department at Large</i>	Assistant Engineer	10	1 @ 190 p. m. 3 @ 230 " 1 @ 225 " 2 @ 250 " 3 @ 300 "
			1	1 @ 305.33 "
Assistant Electrical Engineer			1	1 @ 275 " 1 @ 300 "
			2	2 @ 100 " 1 @ 115 " 1 @ 137.50 " 2 @ 200 "
Electrical Engineer		2	1 @ 275 " 1 @ 300 "	
Junior Engineer		6	2 @ 100 " 1 @ 115 " 1 @ 137.50 " 2 @ 200 "	
Total		110		
<i>Post Office Department Office of the Postmaster General</i>		Assistant Engineers	10	10 @ \$1,000
		Engineer	1	1 @ 1,400
		Total	11	
<i>Department of the Navy Hydrographic Office</i>	Hydrographic Engineer	1	@ \$3,000	
	Bureau of Steam Engi- neering	Expert Radio Aids	2	@ 2,130
		Expert in Wireless Telegraphy	1	@ 3,000
	Engineering Experiment Station	Mechanical Engineer	1	@ 2,800
Quartermaster's Depart- ment, U. S. Marine Corps	Chief Engineer	1	@ 1,800	

THE ENGINEER IN PUBLIC SERVICE

TABLE II—Continued

DEPARTMENT	TITLE	NUMBER	SALARIES
<i>Department of the Navy— Cont.</i> Hydrographic Survey Expeditions	Hydrographic Surveyors	6	1 @ \$1,500
			1 @ 1,800
			2 @ 2,000
			2 @ 2,400
Bureau of Construction and Repairs	Assistant to Inspector	1	1 @ 6.24 p. d.
	Chief Inspector	1	1 @ \$7.04 "
	Electrical Inspector	1	1 @ 7.04 "
	Electrical Expert Aid	8	1 @ 4.00 "
			1 @ 4.96 "
			2 @ 5.04 "
			2 @ 6.00 "
	Electrical Expert Aid (Ship)	11	1 @ 5.28 "
			1 @ 4.08 "
			1 @ 4.00 "
			2 @ 5.04 "
			2 @ 5.52 "
	Electrical and Mechanical Expert Aid	3	1 @ 4.48 "
			1 @ 5.76 "
			1 @ 6.24 "
	Engineering Aid	2	2 @ 7.36 "
	Engineering Expert Aid	1	1 @ 7.62 "
	Expert Aid	3	1 @ 8.00 "
			1 @ 6.56 "
			1 @ 5.48 "
	Expert Electrical Aid	3	1 @ 5.52 "
			1 @ 6.24 "
			1 @ 9.04 "
Expert Radio Aid	13	3 @ 7.04 "	
		1 @ 10.00 "	
		5 @ 6.00 "	
		4 @ 8.00 "	
Instrumentmen	4	1 @ 4.48 "	
		2 @ 5.04 "	
		1 @ 4.88 "	
Instrumentman and Inspector	1	1 @ 5.76 "	
Mechanical Engineer	2	1 @ 8.00 "	
		1 @ 10.00 "	
Structural Engineer and Draftsman	1	1 @ 5.52 "	
Subinspector	25	1 @ 4.16 "	
		1 @ 4.48 "	
		1 @ 4.88 "	
		1 @ 5.20 "	
		1 @ 5.60 "	
		1 @ 5.66 "	
		1 @ 6.16 "	
		1 @ 4.24 "	
		1 @ 7.04 "	
		1 @ 7.52 "	
		1 @ 3.60 "	
		1 @ 4.48 "	
		1 @ 5.04 "	
1 @ 4.50 "			
3 @ 6.00 "			

IN THE SERVICE OF THE U. S. GOVERNMENT

TABLE II—Continued

DEPARTMENT	TITLE	NUMBER	SALARIES	
<i>Department of the Navy</i> Const. Bureau of Construction and Repairs			1 @ \$5.28 p. d.	
			2 @ 4.40 "	
			1 @ 5.36 "	
			6 @ 4.00 "	
			5 @ 4.72 "	
			2 @ 5.52 "	
			2 @ 4.00 "	
	Subinspector (Construction Work)	13	1 @ 5.52 "	
			2 @ 5.04 "	
			4 @ 4.00 "	
			3 @ 4.48 "	
			1 @ 5.28 "	
	Subinspector and Superintendent of Construction	1	1 @ 6.10 "	
	Subinspector (Electrical)	22	1 @ 4.16 "	
			1 @ 4.24 "	
			3 @ 5.04 "	
			11 @ 4.00 "	
		5 @ 4.48 "		
		1 @ 5.28 "		
Subinspector and Draftsman	2	1 @ 5.52 "		
		1 @ 4.00 "		
Surveyor and Subinspector	1	1 @ 6.00 "		
Subinspector (Dredging)	2	2 @ 4.00 "		
Transitman	1	1 @ 6.00 "		
	Total	145		
<i>Department of the Interior</i> Indian Field Service (Irrigation)	Assistant Engineers	9	3 @ \$1,500	
			3 @ 1,800	
			4 @ 1,500	
	Assistant Chief Engineer	1	1 @ 2,500	
	Chief Engineer	1	1 @ 4,000	
	Electrical Engineer	1	1 @ 1,500	
	Engineers	6	4 @ 2,000	
			2 @ 2,100	
	Junior Engineers	11	2 @ 1,200	
			9 @ 1,500	
	Allotment Service	Supervising Engineers	5	5 @ 2,350
		Civil Engineers	3	3 @ 2,100
	Construction Work, Indian Service at Large	Civil Engineers	2	1 @ 1,600
		1 @ 1,500		
	Civil, Mechanical, Electrical and Heating Engineer (Superintendent of Construction)	1	1 @ 1,500	
	Mechanical, Electrical and Heating Engineer (Superintendent of Construction)	1	1 @ 2,900	
United States Geological Survey	Assistant Engineers	26	15 @ 100 p. d.	
			11 @ 125 "	
			8 @ 135 "	
			2 @ 145 "	
	Assistant Electrical Engineer	1	1 @ 1,500	
	Junior Engineers	26	4 @ \$1,080	
			5 @ 1,200	
			7 @ 1,320	
			4 @ 1,350	
			5 @ 1,400	
		2 @ 1,500		
		1 @ 4.00 p. d.		

THE ENGINEER IN PUBLIC SERVICE

TABLE II—Continued

DEPARTMENT	TITLE	NUMBER	SALARIES		
Department of the Interior— Cont. United States Geological Survey	Geographers	7	1 @ \$2,500		
			1 @ 2,700		
			2 @ 3,000		
			1 @ 3,300		
			2 @ 3,500		
	Acting Chief Geographer	1	1 @ 3,500		
	Assistant Engineers (Hydraulic)	24	1 @ 5 00 p. d.		
			2 @ 7 00 "		
			1 @ 1,440		
			2 @ 1,500		
			5 @ 1,520		
			2 @ 1,740		
			3 @ 1,800		
			3 @ 1,850		
			1 @ 1,920		
			2 @ 2,100		
			1 @ 2,150		
	Engineers (Hydraulic)	16	1 @ 5 00 p. d.		
			1 @ 12 00 "		
			1 @ 2,100		
			4 @ 2,100		
			1 @ 2,290		
	3 @ 2,700				
1 @ 2,850					
4 @ 3,000					
Chief Hydraulic Engineer	1	1 @ 4,000			
Topographical Engineers	44	1 @ 7 50 p. d.			
		1 @ 165 p. m.			
		2 @ 180 p. m.			
		7 @ 1,920			
		2 @ 1,990			
		2 @ 2,000			
		1 @ 2,100			
		7 @ 2,100			
		5 @ 2,290			
		6 @ 2,340			
		1 @ 2,450			
		4 @ 2,520			
		3 @ 2,700			
2 @ 3,000					
Assistant Topographers	9	5 @ 1,820			
		4 @ 1,740			
Junior Topographers	25	7 @ 75 p. m.			
		4 @ 80 "			
		11 @ 85 "			
		1 @ 90 "			
		1 @ 1,020			
1 @ 1,140					
Topographers	16	3 @ 150 p. m.			
		1 @ 1,740			
		10 @ 1,800			
		2 @ 2,000			
United States Reclamation Service	Chief Engineer	1	1 @ 7,500		
			Chief of Construction	1	1 @ 5,000
			Consulting Engineer	1	1 @ 5,000

IN THE SERVICE OF THE U. S. GOVERNMENT

TABLE II--Continued

DEPARTMENT	TITLE	NUMBER	SALARIES
Department of the Interior-- Cont. United States Reclamation Service	Engineers	42	7 @ \$2,400
			5 @ 2,520
			2 @ 2,580
			3 @ 2,700
			1 @ 2,760
			3 @ 3,000
			8 @ 3,300
			5 @ 3,300
			1 @ 3,900
			1 @ 4,200
1 @ 4,800			
Assistant Engineers	80	10 @ 1,800	
		2 @ 1,530	
		5 @ 1,560	
		2 @ 1,590	
		1 @ 1,620	
		4 @ 1,680	
		4 @ 1,740	
		21 @ 1,800	
		3 @ 1,860	
		9 @ 1,920	
		3 @ 1,980	
		4 @ 2,040	
		4 @ 2,100	
		2 @ 2,160	
		2 @ 2,220	
3 @ 2,280			
Junior Engineers	40	1 @ 930	
		1 @ 960	
		3 @ 1,080	
		1 @ 1,110	
		1 @ 1,140	
		12 @ 1,200	
		1 @ 1,230	
		2 @ 1,260	
		1 @ 1,290	
		9 @ 1,320	
		2 @ 1,350	
		5 @ 1,380	
		1 @ 1,410	
9 @ 1,440			
Draftsman	13	1 @ 1,140	
		1 @ 1,200	
		2 @ 1,320	
		2 @ 1,440	
		1 @ 1,560	
		3 @ 1,620	
1 @ 1,800			
1 @ 2,040			
Dredge Engineer	24	9 @ 100 p. m.	
		6 @ 110 "	
		1 @ 115 "	
		2 @ 125 "	
		1 @ 150 "	
4 @ 165 "			
Electricians	13	1 @ 75 p. m.	
		5 @ 85 "	
		5 @ 90 "	
		1 @ 95 "	
		1 @ 100 "	
		1 @ 110 "	
		1 @ 115 "	
		1 @ 135 "	
		1 @ 165 "	

THE ENGINEER IN PUBLIC SERVICE

TABLE II—Continued

DEPARTMENT	TITLE	NUMBER	SALARIES	
Department of the Interior Cont. United States Reclamation Service	Foreman	146	11 ① \$75 P. D.	
			1 ① 77.50 "	
			2 ① 82.50 "	
			17 ① 80 "	
			9 ① 85 "	
			13 ① 90 "	
			3 ① 95 "	
			40 ① 100 "	
			1 ① 105 "	
			2 ① 110 "	
			6 ① 115 "	
			12 ① 120 "	
			7 ① 125 "	
			1 ① 130 "	
			5 ① 135 "	
			3 ① 140 "	
			11 ① 150 "	
			1 ① 165 "	
			Instrumentman	24
	1 ① 80 "			
	4 ① 85 "			
	1 ① 87.50 "			
	2 ① 90 "			
	10 ① 100 "			
	1 ① 105 "			
	2 ① 110 "			
	1 ① 127.50 "			
	Levelman	4		
			1 ① 85 "	
			1 ① 120 "	
	Mechanical Superintendent Rodman	1 6	1 ① 150 "	
			6 ① 75 "	
	Superintendent of Construction	19	1 ① 100 "	
			1 ① 110 "	
			2 ① 125 "	
			3 ① 130 "	
			1 ① 135 "	
			1 ① 140 "	
			5 ① 150 "	
			1 ① 170 "	
			1 ① 175 "	
			1 ① 200 "	
			1 ① 250 "	
	Surveyman	76	18 ① 75 "	
			4 ① 77.50 "	
			7 ① 80 "	
			1 ① 82.50 "	
			9 ① 85 "	
			9 ① 90 "	
			1 ① 92.50 "	
			4 ① 95 "	
			7 ① 100 "	
			1 ① 102.50 "	
			2 ① 105 "	
			3 ① 110 "	
			1 ① 115 "	
			1 ① 120 "	
			2 ① 125 "	
			1 ① 135 "	
			1 ① 140 "	
			1 ① 150 "	
	1 ① 175 "			
	Bureau of Mines	Chief Mining Engineer	1	1 ① 5,000



IN THE SERVICE OF THE U. S. GOVERNMENT

TABLE II—Continued

DEPARTMENT	TITLE	NUMBER	SALARIES
<i>Department of the Interior— Cont.</i> Bureau of Mines	Mining Engineers	8	1 @ \$2,580
			1 @ 2,490
			1 @ 2,520
			3 @ 3,000
			1 @ 3,300
		1 @ 3,600	
	Assistant Mining Engineers	9	1 @ 5.00 p. d.
			2 @ 1,620
			1 @ 1,740
			1 @ 1,920
			1 @ 1,980
			1 @ 2,040
			1 @ 2,100
		1 @ 2,280	
	Gas Engineer	1	1 @ 3,180
	Petroleum Engineer	1	1 @ 3,000
	Assistant Petroleum Engineers	2	2 @ 1,800
	Metallurgical Engineers	4	1 @ 8.00 p. d.
			1 @ 10.00 "
			2 @ 3,000
	Assistant Metallurgical Engineers	1	1 @ 1,740
	Mine Safety Engineer	1	1 @ 4,000
	Mine Sanitary Engineer	1	1 @ 2,000
	Engineer of Mine Safety Investigations	1	1 @ 3,600
	Metallurgical Engineer	2	1 @ 8.00 p. d.
		1 @ 10.00 "	
	Junior Engineers	4	1 @ 1,020
			1 @ 1,200
			1 @ 1,320
			1 @ 1,500
	Engineer (Fuel)	7	1 @ 10.00 p. d.
			1 @ 2,400
			1 @ 2,520
			1 @ 2,700
			1 @ 2,820
			1 @ 3,000
		1 @ 4,200	
	Assistant Engineers (Fuel)	6	1 @ 5.00 p. d.
			1 @ 10.00 "
			1 @ 1,500
		1 @ 1,620	
		1 @ 1,740	
	1 @ 1,980		
Junior Engineers (Fuel)	5	3 @ 1,200	
		1 @ 1,320	
		1 @ 1,560	
Chief Mechanical Engineer	1	1 @ 4,800	
Mechanical Engineer	1	1 @ 2,400	
Chemical Engineer	1	1 @ 3,340	
Electrical Engineer	1	1 @ 3,600	
Assistant Electrical Engineer	1	1 @ 2,100	
Junior Electrical Engineers	3	1 @ 900	
		1 @ 1,440	
		1 @ 1,500	
Apprentice Electrical Engineer	1	1 @ 900	
Explosive Engineer	1	1 @ 2,700	
Assistant Explosive Engineer	1	1 @ 1,500	

THE ENGINEER IN PUBLIC SERVICE

TABLE II—Continued

DEPARTMENT	TITLE	NUMBER	SALARIES	
<i>Department of the Interior— Cont.</i> Bureau of Mines	Junior Explosive Engineers	6	1 @ \$1,020	
			1 @ 1,200	
			1 @ 1,320	
			1 @ 1,380	
			1 @ 1,500	
		1 @ 1,500		
	Consulting Chemical Engineer	2	1 @ 8 p. d.	
			1 @ 10 "	
	Consulting Electrical Engineer	2	2 @ 10 "	
	Consulting Metallurgical Engineer	1	1 @ 10 "	
	Consulting Mining Engineers	20	1 @ 7 "	
			1 @ 8 "	
			18 @ 10 "	
	Consulting Petroleum Engineer	2	2 @ 8 "	
	Office of Superintendent of Capitol Buildings	Civil Engineer	1	1 @ 2,400
Chief Electrical Engineer		1	1 @ 2,000	
Office of the Secretary	Mechanical Engineer	1	1 @ 1,000	
	Engineer and Electrician	1	1 @ 1,800	
Yosemite National Park	Construction and Electrical Engineer	1	1 @ 2,000	
	Topographical Engineers	1	1 @ 2,240	
Alaskan Engineering Commission, Sower Division	Engineer	1	1 @ 200 p. m.	
	Assistant Engineer	2	1 @ 200 "	
			1 @ 225 "	
	Resident Engineer	2	2 @ 180 "	
	District Draftsman	1	1 @ 160 "	
	Draftsman	1	1 @ 150 "	
	Estimator	2	2 @ 130 "	
	Rodman	2	2 @ 105 "	
	Azeman	2	2 @ 90 "	
	Chairman	4	2 @ 85 "	
			1 @ 105 "	
	Instrumentman	2	2 @ 120 "	
	Transitman	1	1 @ 150 "	
	Alaskan Engineering Commission, Anchorage Division	Bridge Engineer	1	1 @ 200 "
		Electrical Engineer	1	1 @ 200 "
District Engineer		4	4 @ 200 "	
Municipal Engineer		1	1 @ 250 "	
Resident Engineer		17	17 @ 190 "	
Draftsman		1	1 @ 150 "	
Alaskan Engineering Commission, Fairbanks Division		Electrical Engineer	1	1 @ 200 "
	Estimator	2	2 @ 150 "	
	Resident Engineer	4	4 @ 190 "	
	Townsite Engineer and Manager	1	1 @ 2,400	
	District Engineer	1	1 @ 2,780	
	Total	908		

IN THE SERVICE OF THE U. S. GOVERNMENT

TABLE II—Continued

DEPARTMENT	TITLE	NUMBER	SALARIES	
Department of Agriculture Forest Service—Designation	Pulp and Paper Engineer	1	1 @ \$3,500	
	Engineers in Forest Products	18	1 @ 1,600 2 @ 1,800 3 @ 1,900 1 @ 2,000 1 @ 2,100 1 @ 2,200 4 @ 2,500	
	Assistant Engineers in Forest Products	9	5 @ 900 1 @ 1,200 2 @ 1,500 1 @ 1,900	
	Logging Engineers	4	1 @ 2,400 1 @ 2,500 2 @ 2,900	
	Pilot and Gas Engineer	1	1 @ 1,500	
	Chief Engineer	1	1 @ 3,750	
	Assistant Chief Engineer	1	1 @ 2,900	
	Assistant Engineer	1	1 @ 1,600	
	District Engineers	2	1 @ 2,600 1 @ 2,700	
	Hydro Electrical Engineers	3	3 @ 2,400	
	Civil Engineers	4	1 @ 1,400 1 @ 1,500 2 @ 2,000	
	Telephone Engineers	3	1 @ 1,500 1 @ 1,900 1 @ 2,000	
	Junior Engineer	1	1 @ 1,400	
	Gas Engineer	1	1 @ 1,020	
	Road Engineer	1	1 @ 1,800	
	Weather Bureau Mechanical Superintendent	Engineer	1	1 @ 1,080
		Mechanical Superintendent (Electrical and Mechanical Engineer)	1	1 @ 2,500
		Electrical Engineer and Draftsman	1	1 @ 1,300
		Engineer in charge of Grain Dust Explosion Investigation	1	1 @ 2,400
		Electrical Engineer (Detailed to the Secretary)	1	1 @ 1,300
	Office of Public Roads and Rural Engineering	Chief of Construction	1	1 @ 3,500
		Chief of National Park and Forest Roads	1	1 @ 3,000
		Chief of Maintenance	1	1 @ 3,000
Senior Highway Engineers		21	8 @ 2,300 3 @ 2,400 5 @ 2,500 5 @ 2,700 1 @ 3,000	
Superintendent of Road Construction		3	1 @ 1,930 1 @ 2,100 1 @ 2,400	
Highway Engineers		13	1 @ 1,320 2 @ 1,500 1 @ 1,600 1 @ 1,740 4 @ 1,900 1 @ 2,300	

THE ENGINEER IN PUBLIC SERVICE

TABLE II—Continued

DEPARTMENT	TITLE	NUMBER	SALARY	
Department of Agriculture— Cont. Office of Public Roads and Rural Engineering	Junior Highway Engineers	16	7 @ \$940	
			4 @ 1,040	
			5 @ 1,320	
		Bridge Engineer	1	1 @ 3,200
		Highway Bridge Engineer	1	1 @ 1,500
		Chief of Drainage Investigations	1	1 @ 3,500
		Senior Drainage Engineers	9	6 @ 2,100
				1 @ 2,160
				1 @ 2,240
		Drainage Engineers	16	1 @ 2,400
				2 @ 1,620
				6 @ 1,840
				3 @ 1,960
				1 @ 2,000
				1 @ 2,100
			1 @ 2,200	
			1 @ 2,500	
		Assistant Drainage Engineer	1	1 @ 1,440
		Junior Drainage Engineer	2	2 @ 1,090
		Chief of Irrigation Investigations	1	1 @ 2,750
		Irrigation Engineers	14	1 @ 1,800
				2 @ 1,940
				2 @ 2,000
				1 @ 2,100
				1 @ 2,160
				4 @ 2,200
			1 @ 2,240	
			1 @ 2,400	
		Assistant Irrigation Engineer	9	3 @ 1,200
				4 @ 1,320
				2 @ 1,500
		Chemical Engineer	1	1 @ 3,600
		Engineer of Tests	1	1 @ 3,250
	Assistant Testing Engineer	1	1 @ 1,600	
	Mechanical Engineer	1	1 @ 3,500	
	Associate Mechanical Engineer	1	1 @ 2,400	
	Assistant Mechanical Engineer	3	2 @ 1,600	
			1 @ 1,800	
	Hydro Electrical Engineer	1	1 @ 7 00 p. d.	
	Civil Engineer	1	1 @ 11.00 "	
	Senior Highway Engineer	2	1 @ 8 00 "	
			1 @ 9 00 "	
	Superintendent of Road Construction	1	1 @ 6.00 "	
	Highway Engineer	1	1 @ 7.50 "	
	Junior Highway Engineer	1	1 @ 4.00 "	
	Drainage Engineer	2	1 @ 6.00 "	
			1 @ 7.50 "	
			1 @ 10.50 "	
	Irrigation Engineer	3	1 @ 8 00 "	
			1 @ 6.50 "	
			1 @ 8.75 "	
Bureau of Animal Industry	Sanitary Engineer	1	1 @ 2,250	
	Dairy Engineer	1	1 @ 1,800	
Bureau of Plant Industry	Assistant Engineer in Forest Products	1	1 @ 3.22 p. d.	
	Engineer, Timber Testing	1	1 @ 6 00 "	
	Logging Engineer	1	1 @ 7 20 "	
	Assistant Engineer	1	1 @ 12 00 "	
	Total	187		

IN THE SERVICE OF THE U. S. GOVERNMENT

TABLE II—Continued

DEPARTMENT	TITLE	NUMBER	SALARIES	
<i>Department of Commerce</i>	Civil Engineer	45	3 @ \$1,020	
			1 @ 1,200	
			2 @ 1,320	
			2 @ 1,380	
			2 @ 1,500	
			3 @ 1,620	
			1 @ 1,880	
			1 @ 1,740	
			5 @ 1,800	
			4 @ 1,980	
			1 @ 2,000	
			10 @ 2,100	
			1 @ 2,200	
			1 @ 2,250	
	2 @ 2,400			
	2 @ 2,500			
	1 @ 2,700			
2 @ 3,000				
1 @ 4,000				
Electrical Engineer	10	1 @ 1,400		
		1 @ 1,600		
		3 @ 1,800		
		1 @ 2,400		
		2 @ 1,500		
		1 @ 3,000		
1 @ 3,300				
Mechanical Engineer	1	1 @ 1,400		
Total	56			
<i>Department of Labor</i> Bureau of Immigration— Field	Civil Engineer	1	1 @ \$2,500	
	Senior Engineer	1	1 @ 1,740	
	Chief Engineer	3	1 @ 1,200 1 @ 1,500	
	First Assistant Engineer	1	1 @ 1,380	
	Assistant Engineers	6	1 @ 1,020 7 @ 1,200	
	Engineer and Electrician	1	1 @ 1,300	
	Office of the Secretary	Engineer	1	1 @ 1,000
		Total	15	
	<i>Interstate Commerce Commission</i>	Members, Engineering Board	5	5 @ \$7,500
		District Engineers	5	5 @ 5,400
Resident Engineer		1	1 @ 5,400	
Assistant District Engineers		5	1 @ 3,000 4 @ 4,500	
Senior Civil Engineers		93	13 @ 1,900 33 @ 2,100 10 @ 2,400 2 @ 2,700 10 @ 3,000 4 @ 3,600 2 @ 3,900 1 @ 4,000	

THE ENGINEER IN PUBLIC SERVICE

TABLE II—Continued

DEPARTMENT	TITLE	NUMBER	SALARIES
<i>Interstate Commerce Commission—Cont.</i>	Junior Engineers	348	7 @ \$900
			3 @ 990
			1 @ 1,020
			33 @ 1,080
			110 @ 1,200
			85 @ 1,320
			2 @ 1,440
		100 @ 1,500	
		7 @ 1,680	
	Senior Structural Engineers	16	5 @ 1,800
			6 @ 2,100
			1 @ 2,400
			4 @ 2,600
	Junior Structural Engineers	47	2 @ 900
			6 @ 1,080
			9 @ 1,200
			4 @ 1,320
			22 @ 1,500
			4 @ 1,680
	Senior Mechanical Engineers	12	2 @ 1,800
			2 @ 2,100
			3 @ 2,400
			5 @ 2,600
	Junior Mechanical Engineers	20	3 @ 1,200
			4 @ 1,320
			11 @ 1,500
			2 @ 1,680
Senior Electrical Engineers	5	2 @ 2,100	
		2 @ 2,400	
		1 @ 2,600	
Junior Electrical Engineers	7	1 @ 1,200	
		2 @ 1,320	
		3 @ 1,500	
		1 @ 1,680	
Senior Telegraph and Telephone Engineers	9	3 @ 1,800	
		1 @ 2,700	
		1 @ 2,000	
		1 @ 2,500	
		3 @ 2,900	
Junior Telegraph and Telephone Engineers	9	1 @ 1,080	
		2 @ 1,200	
		3 @ 1,500	
		1 @ 1,620	
		1 @ 1,680	
Senior Signal Engineers	9	1 @ 1,800	
		1 @ 2,100	
		3 @ 2,400	
		1 @ 2,700	
		1 @ 2,000	
		2 @ 2,600	
Junior Signal Engineers	9	1 @ 1,290	
		8 @ 1,500	
Rodman and Chisman	100	52 @ 900	
		9 @ 990	
		38 @ 1,080	
	<b>Total</b>	702	

IN THE SERVICE OF THE U. S. GOVERNMENT

TABLE II—*Concluded*

DEPARTMENT	TITLE	NUMBER	SALARIES
United States Civil Service Commission	Engineers	2	1 @ \$1,600
			1 @ 1,800
The Public Printer	Engineer	1	1 @ 3,000
	Grand Total	2,258	

TABLE III  
NUMBER OF ENGINEERING POSITIONS IN EACH DEPARTMENT—  
FEDERAL SERVICE

	NUMBER OF ENGINEERS ETC.	DEPART- MENTAL TOTAL
<i>Department of the Treasury</i>		
Bureau of the Public Health Service.....	9	
All other Bureaus.....	106	115
<i>Department of War</i>		
Ordnance Department at Large.....	2	
Quartermaster Corps of the Army.....	46	
Signal Service at Large.....	39	
Medical Department at Large.....	4	
Engineering Department at Large.....	19	110
<i>Post Office Department</i>		
Office of the Postmaster General.....	11	11
<i>Department of the Navy</i>		
Hydrographic Office.....	1	
Bureau of Steam Engineering.....	3	
Engineering Experiment Station.....	1	
Quartermaster's Department U. S. Marine Corps.....	1	
Hydrographic Survey Expeditions.....	6	
Bureau of Construction and Repairs.....	133	145
<i>Department of the Interior</i>		
Indian Field Service (Irrigation).....	34	
Allotment Service.....	3	
Construction Work, Indian Service at Large.....	4	
U. S. Geological Survey.....	209	
U. S. Reclamation Service.....	500	
Bureau of Mines.....	96	
Office of Superintendent of Capitol Buildings.....	3	
Office of the Secretary.....	1	
Yosemite National Park.....	2	
Alaskan Engineer Comm., Sewer Division.....	23	
Alaskan Engineer Comm., Anchorage Division.....	24	909
<i>Department of Agriculture</i>		
Forest Service—Designation.....	46	
Weather Bureau.....	1	
Mechanical Superintendent.....	4	
Office of Public Roads and Rural Engineering.....	130	
Bureau of Animal Industry.....	2	
Bureau of Plant Industry.....	4	187
<i>Department of Commerce</i>		
Department of Commerce.....	56	56



IN THE SERVICE OF THE U. S. GOVERNMENT

TABLE III—*Concluded*

	NUMBER OF ENGINEERS ETC.	DEPART- MENTAL TOTAL
<i>Department of Labor</i>		
Bureau of Immigration—Field .....	14	
Office of the Secretary .....	1	
	—	15
<i>Interstate Commerce Commission</i>		
Interstate Commerce Commission .....	702	
	—	702
<i>United States Civil Service Commission</i>		
United States Civil Service Commission .....	2	
	—	2
<i>The Public Printer</i>		
The Public Printer .....	1	
	—	1
	Total	2,253

THE ENGINEER IN PUBLIC SERVICE

TABLE IV  
NUMBER OF ENGINEERING POSITIONS AT EACH RATE OF PAY  
FEDERAL SERVICE

NUMBER	ANNUAL SALARY	TOTAL SALARIES	NUMBER	ANNUAL SALARY	TOTAL SALARIES
68	\$900	\$61,200	19	\$2,200	\$41,800
1	930	930	9	2,250	20,250
22	960	21,120	12	2,280	28,560
14	1,000	14,000	6	2,340	14,040
9	1,020	9,180	82	2,400	196,800
93	1,080	100,440	2	2,460	4,920
1	1,110	1,110	20	2,500	50,000
3	1,140	3,420	11	2,520	27,720
176	1,200	211,200	3	2,580	7,740
1	1,230	1,230	1	2,600	2,600
2	1,260	2,520	24	2,700	64,800
1	1,290	1,290	1	2,750	2,750
129	1,320	170,280	1	2,760	2,760
2	1,350	2,700	2	2,800	5,600
14	1,380	19,320	1	2,820	2,820
12	1,400	16,800	1	2,880	2,880
1	1,410	1,410	1	2,900	2,900
16	1,440	23,040	54	3,000	162,000
204	1,500	306,000	2	3,130	6,260
2	1,530	3,060	1	3,180	3,180
1	1,550	1,550	1	3,240	3,240
10	1,560	15,600	1	3,250	3,250
2	1,590	3,180	12	3,300	39,600
19	1,600	30,400	1	3,360	3,360
24	1,620	38,880	5	3,500	17,500
20	1,680	33,600	30	3,600	108,000
20	1,700	34,000	3	3,750	11,250
17	1,740	29,580	6	3,900	23,400
142	1,800	255,600	5	4,000	20,000
6	1,860	11,160	2	4,200	8,400
5	1,900	9,500	4	4,500	18,000
19	1,920	36,480	2	4,600	9,600
16	1,980	31,680	3	5,000	15,000
65	2,000	130,000	6	5,400	32,400
6	2,040	12,240	1	6,000	6,000
96	2,100	201,600	6	7,500	45,000
19	2,160	41,040			

IN THE SERVICE OF THE U. S. GOVERNMENT

TABLE IV—Concluded

MONTHLY SALARY	EQUIVALENT ANNUAL SALARY	TOTAL SALARIES	MONTHLY SALARY	EQUIVALENT ANNUAL SALARY	TOTAL SALARIES
42 @ \$75.00	\$900	\$37,800	1 @ \$137.50	\$1,650	\$1,650
5 @ 77.50	930	2,850	5 @ 140.00	1,680	8,400
29 @ 80.00	960	27,840	2 @ 145.00	1,740	3,480
3 @ 82.50	990	2,970	27 @ 150.00	1,800	48,600
35 @ 85.00	1,020	35,700	4 @ 155.00	1,880	7,440
1 @ 87.50	1,050	1,050	1 @ 160.00	1,920	1,920
33 @ 90.00	1,080	35,640	4 @ 165.00	1,980	7,920
1 @ 92.50	1,110	1,110	6 @ 166.66	2,000	12,000
11 @ 95.00	1,140	12,540	1 @ 170.00	2,040	2,040
86 @ 100.00	1,200	103,200	2 @ 175.00	2,100	4,200
1 @ 102.50	1,230	1,230	24 @ 180.00	2,160	51,840
8 @ 105.00	1,260	10,080	5 @ 190.00	2,280	11,400
16 @ 110.00	1,320	21,120	8 @ 200.00	2,400	19,200
17 @ 115.00	1,380	23,460	3 @ 208.33	2,500	7,500
15 @ 120.00	1,440	21,600	2 @ 225.00	2,700	5,400
19 @ 125.00	1,500	28,500	4 @ 250.00	3,000	12,000
1 @ 127.50	1,530	1,530	1 @ 275.00	3,300	3,300
9 @ 130.00	1,560	14,040	12 @ 300.00	3,600	43,200
16 @ 135.00	1,620	25,920	1 @ 333.33	4,000	4,000

DAILY WAGE	EQUIVALENT* ANNUAL SALARY	TOTAL SALARIES	DAILY WAGE	EQUIVALENT* ANNUAL SALARY	TOTAL SALARIES
1 @ \$3.33	\$1,000	\$1,000	2 @ \$6.16	\$1,848	\$3,696
1 @ 3.52	1,056	1,056	3 @ 6.24	1,872	5,616
1 @ 3.60	1,080	1,080	1 @ 6.48	1,944	1,944
27 @ 4.00	1,200	32,400	1 @ 6.50	1,950	1,950
1 @ 4.08	1,224	1,224	3 @ 6.56	1,968	5,904
1 @ 4.16	1,248	1,248	1 @ 6.75	2,025	2,025
2 @ 4.24	1,272	2,544	4 @ 7.00	2,100	8,400
3 @ 4.40	1,320	3,960	6 @ 7.04	2,112	12,672
12 @ 4.48	1,344	16,128	1 @ 7.20	2,160	2,160
5 @ 4.72	1,416	7,080	2 @ 7.36	2,208	4,416
1 @ 4.80	1,440	1,440	4 @ 7.50	2,250	9,000
3 @ 4.88	1,464	4,392	1 @ 7.52	2,256	2,256
1 @ 4.96	1,488	1,488	14 @ 8.00	2,400	33,600
5 @ 5.00	1,500	7,500	1 @ 8.48	2,544	2,544
12 @ 5.04	1,512	18,144	1 @ 9.00	2,700	2,700
1 @ 5.20	1,560	1,560	1 @ 9.04	2,712	2,712
5 @ 5.28	1,584	7,920	27 @ 10.00	3,000	81,000
1 @ 5.36	1,608	1,608	1 @ 10.50	3,150	3,150
1 @ 5.50	1,650	1,650	1 @ 11.00	3,300	3,300
8 @ 5.52	1,656	13,248	2 @ 12.00	3,600	7,200
1 @ 5.60	1,680	1,680	1 @ 12.48	3,744	3,744
2 @ 5.68	1,740	3,480			
3 @ 5.76	1,728	5,184			
17 @ 6.00	1,800	30,600			

\*Counting 300 working days to the year.

TABLE V  
 APPOINTMENTS OF ENGINEERS MADE FROM COMPETITIVE ELIGIBLE LISTS, FEDERAL CIVIL SERVICE, FOR FISCAL YEARS 1911-1915

POSITION	NUMBER APPOINTED					TOTAL 1911-1915
	1911	1912	1913	1914	1915	
Assistant Engineer			2		5	7
Ballistic Engineer		1				1
Chemical Engineer			1		1	2
Chief Engineer, Coast and Geodetic Survey		1				1
Chief Engineer				1	1	2
Civil Engineer and Civil Engineer and Draftsman	8	3	5	4	48	68
Civil Engineer, Interstate Commerce Commission				143		143
Civil Engineer, Junior			1	1	84	86
Civil Engineer, Senior				46	45	91
Civil Engineer and Superintendent of Construction	1	1		3		5
Civil Engineer, Student	7	10	9	10	3	39
Designing Engineer					1	1
Drainage Engineer	2	1	1	1	1	5
Drainage Engineer, Assistant			1	3		3
Electrical Engineer	1			2	2	7
Electrical Engineer, Junior		1	2	2	2	3
Electrical Engineer, Senior				1	2	1
Electrical Engineer and Draftsman		1				1
Electrical and Mechanical Engineer			1			1
Engineer			5			5
Engineer-Physicist, Bureau of Standards		1				1
Examiner of Surveys	1			10		11
Explosives Engineer, Assistant					4	4
First Assistant Engineer				1		1
Forest Products Engineer	3					3
Forest Products Engineer, Assistant	2	6	1	2	3	14
Forest Products Engineer, Chemical	2	1				3
Forest Products Engineer, Chemical Assistant		2				2
Fuel Engineer, Junior				2	2	4
Geological Survey Engineer, Junior			8			8
Heating and Ventilating Engineer				1	1	2
Highway Engineer	1	2			5	8
Highway Engineer, Senior			11	8		19
Highway-Bridge Engineer					1	1
Highway-Bridge Engineer, Junior						
Hydraulic Engineer	19	6				25
Hydroelectrical Engineer	3	1		1		5
Indian Service Engineer	9	4			13	26
Inspector of Mechanical and Electrical Engineering	1			1		2
Irrigation Engineer, Assistant			4			4
Irrigation Engineer, Chief			1			1

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TABLE V—Concluded

POSITION	NUMBER APPOINTED					TOTAL 1911-1915
	1911	1912	1913	1914	1915	
Irrigation Engineer, Department of Agriculture	1	8	..	..	..	9
Irrigation Engineer, Indian Service	..	..	1	..	..	1
Junior Engineer	8	9	1	14	13	45
Laboratory Aid and Engineer	..	..	4	..	..	4
Logging Engineer	..	..	3	3	..	6
Mechanical Engineer	..	..	..	4	5	9
Mechanical Engineer, Aeronautical	..	..	..	..	1	1
Mechanical Engineer, Assistant	..	..	1	..	..	2
Mechanical Engineer, Chief	1	..	..	..	..	1
Mechanical Engineer, Junior	1	..	1	4	..	6
Mechanical Engineer, Senior	..	..	4	4	..	8
Mechanical and Electrical Engineer	1	..	..	1	..	2
Metallurgical Engineer	..	..	..	2	1	3
Metallurgical Engineer	1	..	..	..	..	1
Mine Safety Investigations Engineer	..	..	..	1	..	1
Mine Sanitary Engineer	1	..	2	..	..	3
Mining Engineer	2	..	..	2	..	4
Mining Engineer, Assistant	1	1	..	..	..	2
Mining Engineer, Consulting	..	..	..	1	..	1
Mining Engineer, Junior	8	..	3	3	..	9
Physicist Engineer, Associate	..	..	..	1	..	1
Petroleum Engineer	..	..	2	..	..	2
Pulp and Paper Engineer	..	..	1	..	..	1
Railway Civil Engineer, Junior	..	..	..	41	..	41
Railway Mechanical Engineer, Junior	..	..	..	3	..	3
Railway Signal Engineer	..	..	1	3	..	4
Railway Signal Engineer, Junior	..	..	..	1	..	1
Railway Signal Engineer, Senior	..	..	3	7	..	10
Railway Structural Engineer, Junior	..	..	..	7	..	7
Sanitary Engineer	..	1	2	1	..	4
Structural Engineer	..	..	2	2	..	4
Structural Engineer, Junior	..	..	..	5	..	5
Structural Engineer and Draftsman	..	..	..	2	..	2
Structural Engineer, Senior	..	..	7	5	..	12
Surveyor	1	..	41	2	23	67
Telephone and Telegraph Engineer, Junior	..	..	..	4	..	4
Telephone and Telegraph Engineer, Senior	..	..	3	6	..	9
Tests Engineer	2	..	..	..	..	2
Torpedo Engineer	..	..	..	1	..	1

TABLE VI  
 APPOINTMENTS OF DRAFTSMEN MADE FROM COMPETITIVE ELI-  
 GIBLE LISTS, FEDERAL CIVIL SERVICE, FOR FISCAL  
 YEARS 1911-1915

POSITION	NUMBER APPOINTED					TOTAL 1911-1915
	1911	1912	1913	1914	1915	
Architectural Draftsman	2	2	6	5	4	19
Architectural Draftsman, Copyist			2	1		3
Architectural Draftsman, Junior	1		4		3	8
Architectural and Structural Steel Draftsman		3	1	2		6
Architectural Landscape Draftsman				2		2
Draftsman					6	6
Electrical Draftsman				1	3	4
Electrical Draftsman, Copyist			2	3	7	12
Engineer Draftsman	2		2			4
First Class Structural Steel Work Draftsman				2		2
Heating and Ventilating Draftsman		3	1			4
Hull Draftsman		1		5	3	9
Marine Engine and Boiler Draftsman	2			7	8	17
Marine and Engine Boiler Draftsman, Assistant				1		1
Marine Engine and Boiler Draftsman, Copyist			1	9	14	24
Mechanical Draftsman	27	29	21	21	36	134
Mechanical Draftsman, Copyist			1	1		2
Mining Draftsman		1	1			2
Minor Draftsman				4	4	8
Minor Draftsman or Copyist				3	3	6
Ordinance Draftsman			3	6	9	18
Ordinance Draftsman, Copyist			5	2	1	8
Ship Draftsman				23	37	60
Ship Draftsman, Assistant			2			2
Ship Draftsman, Copyist				32	30	62
Structural Draftsman				1		1
Structural Steel Draftsman				2		2
Structural Steel Work Draftsman				3		3
Surveyor Draftsman					12	12
Topographic and Copyist Topographic Draftsman	25	16	13	29	22	105
Topographic Draftsman (Panama Canal Service)	5	2	5		3	15
Topographic Draftsman, Junior			1	1		2
Junior Topographer		12		11		23

**TABLE VII**  
**QUALIFICATIONS REQUIRED FOR APPOINTMENT TO ENGINEERING POSITIONS IN FEDERAL CIVIL SERVICE**

TITLE OF POSITION	AGE AND PHYSICAL QUALIFICATIONS	APPORTIONMENT	EDUCATION, EXPERIENCE AND TRAINING	CONTENT OF EXAMINATION AND WEIGHTS OF SUBJECTS	SALARY
Aeronautical Engineer	Between 20 and 45. Medical certificate required. Must be of good moral character and temperate, of good speech and manner.	N. and A. <sup>1</sup>	Relative weight, 100. Required, graduation in mechanical engineering, thorough knowledge of aerodynamics, and considerable experience in design and construction of various types of air-craft.	Technical education, 30. Experience and fitness, 70.	\$3,600
Aid qualified in engineering, Bureau of Standards	Between 18 and 28. Medical certificate required.	A. and N.	Relative weight, 30. Must be graduate from mechanical training, technical or scientific high school, or have equivalent training. College work in engineering given special credit.	Mathematics (including elementary algebra, geometry and trigonometry), 35. Elementary physics and mechanics, 35. Training and experience, 30.	\$500-840
Apprentice Electrical Engineer, Bureau of Mines	Under 30. Medical certificate required.	A.	Relative weight, 30. Required, graduation in electrical engineering and 1 year's subsequent experience in electrical engineering.	Electrical engineering, 70. Education and experience, 30.	\$720-960
Chemical Engineer	Between 25 and 40. No medical certificate.	N.	Relative weight, 80. Educational training equivalent to Ph.D. degree and at least 5 years' experience in chemical investigation of fuels, oils, or gases.	General education and scientific training, 40. Professional experience and fitness, 40. Published or manuscript reports, 20.	\$2,400-4,000
Civil Engineer, Philippine Service	Between 25 and 40. Physically qualified to perform duties. Medical certificate required. Good, moral character and temperate habits.	N.	Relative weight, 100. Required, 3 years' preliminary training in engineering, or graduation in engineering, and 2 years' experience in design and construction of irrigation or water supply systems, or of structural steel and reinforced concrete bridges or buildings.	General and technical education and preliminary training, 30. Responsible experience and fitness, 70.	\$1,800-3,000

<sup>1</sup> N. is abbreviation for Non-apportioned. A. is abbreviation for Apportioned. The meaning of "apportioned" and "non-apportioned" may be briefly explained as follows:—The civil service law requires that, as nearly as the conditions of good administration will warrant, appointments to positions in the departments at Washington shall be apportioned among the several States and Territories and the District of Columbia upon the basis of population as ascertained at the last preceding census. Certain positions are exempted from the requirements of apportionment, and, for several reasons, it is not possible to apportion the appointments equally among the states, so that some states have received a large proportionate share than others.

TABLE VII—Continued

TITLE OF POSITION	AGE AND PHYSICAL QUALIFICATIONS	APPORTIONMENT	EDUCATION, EXPERIENCE AND TRAINING	CONTENT OF EXAMINATION AND WEIGHTS OF SUBJECTS	SALARY
Civil Engineer, Junior, Engineer Department at Large	20 years or over. Both married and unmarried men. No medical certificate.	Usually N., rarely A.	Relative weight, 23. Graduates in civil engineering or 4 years' responsible experience in civil engineering.	Pure and applied mathematics, to and including calculus, 20. Use and construction of instruments and surveying, 30. Design and construction, elementary, 25. Training and experience, 25.	(See footnote 4)
Civil Engineer, Junior, Grade 1, Interstate Commerce Commission	Between 21 and 30. Must be of good moral character, temperate habits, free from colorblindness, and physically qualified to perform required duties.	Ordinarily only residents of districts appointed.*	Relative weight, 50. Required, (a) 5 years' civil engineering practice, of which 2 years must have been railway civil engineering, or (b) graduation in civil engineering from recognized school, and 2 years' experience, of which 1 year must have been railway engineering. Must have had engineering experience within 2 years prior to examination.	Theory and practice of railway surveying and notebook-keeping and the mathematics used in this branch of engineering, including algebra, geometry and trigonometry, but not calculus, 50. Education, training, and experience, 50.	\$1,200-1,680
Civil Engineer, Junior, Grade 2, Interstate Commerce Commission.	Same as grade 1.	Same as grade 1.	Relative weight, 50. Required, (a) 2 years' experience in engineering, either as civil engineer, structural engineer, or in the construction of buildings, or (b) completion of junior year in civil engineering in recognized school. Must have had engineering training, or experience within 1 year prior to examination.	Same subjects as grade 7. Examination elementary in character.	\$720-1,080
Civil Engineer, Senior, Interstate Commerce Commission	Between 28 and 45. Must be physically qualified to perform duties, of good moral character, and qualified to confer with railway and public officials.	Ordinarily appointments made only from districts.	Relative weight, 100. Required, 4 years' apprenticeship training, or graduation in civil engineering, and not less than 4 years of responsible practical experience in railway civil engineering.	General and technical education, and preliminary or apprenticeship training, 30. Responsible experience and fitness, 70.	\$1,800-2,700

THE ENGINEER IN PUBLIC SERVICE



Civil Engineer, Senior, Grade 1, Interstate Commerce Commission	Between 30 and 60.	N. and A.	Same in respective line as senior mechanical engineer, grade 1.	Same in respective line as senior mechanical engineer.	\$3,000-4,800
Civil Engineer and Draftsman, Junior, Departmental Services	20 years or over. Men only. No medical certificate.	Usually N., rarely A.	Same as junior engineer, civil Engineer, Department at Large.	Subjects of junior engineer, civil examination, 60. Drawing, 40.	[See footnote 4]
Civil Engineer and Superintendent of Construction, Quartermaster Corps	Over 20. No medical certificate.	N.	Relative weight, 25. Required, graduation from college or university, 1 year's experience in architectural construction and supervision and some practical experience in civil engineering.	Mathematics to and including calculus, 15. Theory and practice of surveying and use and care of instruments, 25. Building construction and specifications, 35. Training and experience, 25.	[See footnote 4]
Civil Engineer, Student, Office of Public Roads	20 or over. No medical certificate.	N.	Required, graduation in civil engineering.	Mathematics and mechanics, 50. Surveying, construction and materials of construction, 50.	[See footnote 4]
Concrete Building Designer, Philippine Service	Between 25 and 40. Medical certificate required.		Relative weight, 100. Required, 4 years' general and special engineering experience, of which 2 years was in concrete construction work, and 1 year in design.	General and technical education and fitness, 20. General engineering experience, 20. Special experience in concrete design and construction, 60.	\$2,000-2,500

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<sup>1</sup> Where experience subsequent to graduation is not required in any of the positions in this table, a senior student who expects to graduate within 6 months may apply for and take the examination, but if he passes, will not be certified until he furnishes evidence of graduation.

<sup>2</sup> The following rules apply to positions with the Interstate Commerce Commission:

For the purpose of certification the United States is divided into districts corresponding to those established by the Interstate Commerce Commission for the prosecution of its engineering work. Certification for appointment in any district will be made of the highest eligibles holding legal residence in that district, except that upon request of the Interstate Commerce Commission certification may be made of the highest eligibles on the register for the entire country who have expressed willingness to accept appointment where the vacancy exists. When there is a shortage of eligibles in any district eligibles from adjoining districts who are willing to accept appointment in the district in which such shortage exists may be certified upon request of the Interstate Commerce Commission. The districts are as follows:

District I.—Maine, New Hampshire, Vermont, Massachusetts, Rhode Island, Connecticut, New York, New Jersey, Pennsylvania, Maryland, Delaware, District of Columbia, West Virginia, Virginia, and North Carolina. Headquarters, Washington, D. C.

District II.—Ohio, Indiana, Kentucky, Tennessee, Alabama, Mississippi, Georgia, South Carolina, Florida, Panama, and Porto Rico. Headquarters, Chattanooga, Tenn.

District III.—Michigan, Wisconsin, Minnesota, Iowa, Illinois, Louisiana, and Arkansas. Headquarters, Chicago, Ill.

District IV.—North Dakota, South Dakota, Nebraska, Colorado, Kansas, Missouri, Oklahoma, and Texas. Headquarters, Kansas City, Mo.

District V.—Montana, Wyoming, Utah, Idaho, Nevada, Washington, Oregon, California, Arizona, New Mexico, and Alaska. Headquarters, San Francisco, Cal.

TABLE VII—Continued

TITLE OF POSITION	AGE AND PHYSICAL QUALIFICATIONS	APPORTIONMENT	EDUCATION, EXPERIENCE AND TRAINING	CONTENT OF EXAMINATION AND WEIGHTS OF SUBJECTS	SALARY
Designing Engineer, Reclamation Service	No medical certificate.	A.	Relative weight, 100. Required, 5 years' irrigation engineering experience, of which two were spent in the preparation of original designs of irrigation structures, or in the review of such designs, and experience in the supervision of the execution of such designs.	General and technical education, 20. General engineering experience, 30. Special engineering experience, 50.	\$2,000-3,000
Drainage Engineer	Under 45. No medical certificate.	N.	Relative weight, 60. Required, graduation in civil engineering, and 3 years' subsequent actual responsible experience in drainage engineering work as applied to agricultural lands, or, if not graduates, at least 7 years' actual responsible civil engineering experience, 3 years of this in drainage of agricultural lands, or a combination of training and experience aggregating 7 years.	Education and experience in drainage engineering, 70. Experience in other lines of engineering, 10. Experience in delivering lectures and addressing meetings, 10. Publications and reports, 10.	\$1,800-2,100
Drainage Engineer, Assistant, Office of Experiment Stations, Department of Agriculture	Between 21 and 30. No medical certificate.	N.	Relative weight, 35. Required, educational training equivalent to bachelor's degree in engineering, science, or agriculture.	Engineering and drainage questions for (a) irrigated land, or (b) humid lands, 40. Report on some subject of agricultural drainage, 25. Education, training, and experience, 35.	\$1,000-1,500
Drainage Engineer, Junior	Under 30. No medical certificate.	N.	Relative weight, 90. Required, graduation in civil engineering, or at least 4 years' actual civil engineering practice.	Mathematics and mechanics, pure and applied, 40. Surveying, engineering, and drainage, 40. Education and experience, 20.	\$960-1,620
Drainage Engineer, Senior	Under 50. No medical certificate.	N.	Same as drainage engineer, except 0 years' experience required.	Same as drainage engineer.	\$2,320-3,000
Electrical Engineer, Junior, Bureau of Mines	Under 30. Investigative ability desired. Medical certificate required.	A.	Relative weight, 60. Required, graduation in electrical engineering and 1 year's experience in electrical engineering outside college. Special credit for electrical investigative work.	Practical questions in electrical engineering, 40. Education and experience, 60.	\$960-1,200

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THE ENGINEER IN PUBLIC SERVICE

Electrical Engineer, Junior, Grades 1 and 2, Interstate Commerce Commission	Between 21 and 36. Must be of good moral character, temperate habits, free from color-blindness, and physically qualified to perform required duties. Males only.	Ordinarily only residents of districts appointed.	Relative weight 50. Required, for Grade 1, 5 years' experience in electrical engineering of which 2 years must have been with electric railway or electrified steam railway. For grade 2, 3 years' similar experience, 1 of which must have been in electrical railway work. In either grade, graduation in electrical engineering is accepted as equivalent to 2 years' training.	Theory and practice of railway electrical engineering as applied to electric traction power generation and transmission, lighting and motor drive, and mathematics used in this branch of engineering, including algebra, geometry and trigonometry, but not including calculus, 50. Education, training, and experience, 50.	Grade 1 \$1,200-1,680 Grade 2 \$720-1,080
Electrical Engineer, Senior, Interstate Commerce Commission	Same as senior civil engineer.	Same as senior civil engineer.	Same experience required in this branch of engineering as is required of senior civil engineer.	Same in this line of engineering as senior civil engineer.	\$1,800-2,700
Electrical Engineer, Senior, Grade 1, Interstate Commerce Commission	Between 30 and 55.	N. and A.	Same in respective line as senior mechanical engineer, Grade 1.	Same in respective line as senior mechanical engineer, Grade 1.	\$3,000-4,800
Electrical Engineering Inspector, Quartermaster, Corps of Army	20 or over.		Relative weight, 25. Three years' practical experience in electrical engineering required. Graduation in engineering equivalent to 1 year.	Mathematics and practical calculations, 10. Drawing, 20. Theory and practice of electrical engineering, 35. Training, experience, and fitness, 35.	\$1,200-1,500
Engineer-Economist	Under 51. Medical certificate not required.	A.	Relative weight, 100. Required, graduation in civil engineering and 4 years' experience in highway engineering, 2 years of this in charge of responsible highway work involving economic features, or, of those who have not graduated, 8 years' experience, or a combination of training and experience.	Education, 20. Experience in the practice of engineering, 40. Experience in economic and extension work, 40.	\$2,000-2,500
Engineer-Physicist, Associate	Between 30 and 45. No medical certificate required.	N. and A.	Relative weight, 85. Educational training required for graduation in engineering, and 3 years' experience in testing metals, required. Desired to obtain those proficient in mathematics, and capable of independent research.	Education, 40. Experience, 45. Publications or thesis, 15.	\$2,000-3,000

IN THE SERVICE OF THE U. S. GOVERNMENT

TABLE VII—Continued

TITLE OF POSITION	AGE AND PHYSICAL QUALIFICATIONS	APPORTIONMENT	EDUCATION, EXPERIENCE AND TRAINING	CONTENT OF EXAMINATION AND WEIGHTS OF SUBJECTS	SALARY
Explosives Engineer, Assistant	Between 21 and 45. No medical certificate.	N. and A.	Relative weight, 40. Required, education equivalent to graduation in mining engineering, and 3 years' experience with mines, or in manufacture, test and use of explosives.	Physics, 20. General chemistry, 10. Mining engineering, 30. Education and experience, 40.	\$1,620-2,100
Forest Products Engineer, Assistant	Between 20 and 40. No medical certificate required.	A. and N.	Relative weight, 25. Must be graduate in mechanical or civil engineering, or have 4 years' practical work in design and construction equivalent to such training.	Technique of drying, treating, and testing timber, 25. Mechanics and mathematics, including calculus, especially problems with reference to flexure of beams under static and impact loading, 25. Drafting and machine and structural design, 25. Education, training, and experience, 25.	\$900-1,200
Fuel Engineer, Junior	Between 22 and 30. Medical certificate required.	N. and A.	Relative weight, 40. Required, graduation in mechanical engineering, or its equivalent, and 3 years' experience in fuel engineering and management of furnaces.	Elementary physics and chemistry, 10. Essay on mechanical engineering subject, with sketches, 15. Mechanics and dynamics of engineering, 10. Testing of fuels, 25. Education, training, and experience, 40.	\$1,380-1,500
Gas Waste Engineer	Between 30 and 50. No medical certificate.	N.	Relative weight, 30. Required, graduation in mechanical engineering, and 5 years' experience covering development, production, transportation, distribution and utilization of natural gas, or, if not a graduate, 8 years of such experience.	Education and experience, 80. Publications or reports, 20.	\$2,400-3,000
Heating and Ventilating Engineer	Over 23. No medical certificate.	N. and A.	Relative weight, 30. Eight years' experience in design, installation or operation of heating and ventilating plants required. Graduation in engineering equivalent to 4 years' experience.	Practical questions in heating and ventilating, 35. Drawing and design, 35. Training and experience, 30.	\$1,800

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THE ENGINEER IN PUBLIC SERVICE

Heating and Ventilating Engineer and Draftsman, Treasury Department	18 or over. No medical certificate required.	A.	Relative weight, 30. Required, 4 years' experience in designing or installation of heating and ventilating systems in large buildings. Technical degree in heating and ventilating engineering accepted in lieu of 2½ years' experience.	Practical questions in heating and ventilating, 35. Drawing and designing plans for heating and ventilating, 35. Training and experience, 30.	\$1,200
Highway Bridge Engineer	Under 40. Medical certificate required.	A. and N.	Relative weight, 50. Required, (a) 4 years' preliminary experience, or graduation in civil engineering, and (b) 2 years in bridge engineering, 1 of which must have been in highway bridge engineering.	Practical questions in highway bridge engineering, 30. Highway bridge drafting, 20. Education and preliminary training, 10. Responsible experience in bridge engineering, 40.	\$1,800-2,100
Highway Bridge Engineer, Senior	Over 30. Physically qualified for duties. Medical certificate required.	A. and N.	Relative weight, 100. Required, (a) 4 years' preliminary engineering experience or graduation in civil engineering, and (b) 7 years' responsible engineering experience, of which 4 years must have been in bridge engineering, and 2 years in highway bridge engineering.	Education and preliminary training in engineering, 30. Responsible experience in engineering, 70.	\$2,400-3,300
Hydro-electrical Engineer	Between 25 and 45. No medical certificate.	N.	Relative weight, 100. Required, 6 years' practical experience, of which 2 were in the constructing and installing of electric and hydro-electric machinery, and 4 years' experience in mechanical and electrical engineering, of which 2 were in the operation of a hydro-electric power plant. Graduation from technical school accepted in lieu of 1 year's training.	General education and technical training, 40. Practical experience and fitness, 60.	\$2,400
Electrical Engineering Engineer, Treasury Department	Over 22. No medical certificate.	A.	Relative weight, 35. Must be high school graduate, with 3 years' experience as draftsman in connection with illuminating, engineering and electrical work, or technical graduate with 6 months' experience as electrical draftsman or installing electric work.	Theoretical and practical questions in electrical science (with especial reference to lighting and elevator work), 25. Drawing and design (with reference to same subjects), 40. Training and experience, 35.	\$1,200

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IN THE SERVICE OF THE U. S. GOVERNMENT

TABLE VII—Continued

TITLE OF POSITION	AGE AND PHYSICAL QUALIFICATIONS	APPORTIONMENT	EDUCATION, EXPERIENCE AND TRAINING	CONTENT OF EXAMINATION AND WEIGHTS OF SUBJECTS	SALARY
Inspector of Engineering Material, Assistant	22 or over. No medical certificate.	N. and A.	Relative weight, 40. Required, 3 years' practical experience in mechanical engineering, preferably in testing departments. Graduation in mechanical engineering equivalent to 1½ years' experience.	Mathematics (through plane trigonometry, logarithms and slide rule), 20. Practical and theoretical questions and calculations on orders for material, shop tests, etc., 40. Education, training and experience, 40.	\$4.48 a day
Inspector of Mechanical and Electrical Engineering, Treasury Department	20 or over. Male. No medical certificate.	N. and A.	Relative weight, 30. Practical experience expected in design, construction and inspection of heating and ventilating apparatus, plumbing, water supply, and drainage, conduit and wiring work, elevators, vacuum-cleaning plants, and electric generating plants.	Practical questions in mechanical and electrical engineering, 50. Drawing and design, 20. Training and experience, 30.	\$2,000-2,100
Irrigation Engineer, Assistant, Office of Public Roads and Rural Engineering, Department of Agriculture	Under 40. Male. Medical certificate required.	N.	Relative weight, 30. Four years' experience in civil engineering or in study of civil engineering at technical school.	Mathematics, physics, chemistry, surveying, and applied mechanics, 30. Essay on irrigation subject, 10. Practical questions on pumping plants, irrigation, etc., 30. Education and experience, 30.	\$1,000-1,500
Junior Engineer, Bureau of Chemistry, Department of Agriculture	Between 20 and 45. No medical certificate.	A.	Relative weight, 35. Required, in mechanical or electrical engineering and 2 years' practical experience in experimental laboratory or in machine testing.	Mechanics and dynamics of engineering, 25. Technical engineering testing, 40. Education and experience, 35.	\$1,200-1,800
Junior Engineer, Reclamation Service	20 to 45. Must be physically sound. Medical certificate required.	N.	Relative weight, 30. 70 per cent on experience allowed for graduation in civil engineering.	Mathematics and applied mechanics, including elementary calculus, 25. Theory and practice of construction on land and in water, elementary, 30. Theory and practice of topographic and hydrographic surveying, 20. Drawing and lettering, 15. Training and experience, 10.	\$600 upwards.

Junior Engineer, Water Resources Branch	Over 20. No medical certificates.	N. and A.	Relative weight, 35. Graduation in engineering, or 2 years' practical experience in civil engineering in work above grade of rodman or shainman.	Algebra and geometry, 5. Plane sur- veying, 10. Irrigation engineering, 10. River hydraulics, 25. Water- power engineering, 15. Education and experience, 25.	\$1,080-1,200
Laboratory Assistant, Office of Public Roads and Rural Engineering, De- partment of Agri- culture	Over 19. No medical certificates.	N. and A.	Relative weight, 30. Required, high school education and 1 year in test- ing laboratory, or 2 years at tech- nical college.	Physics, 20. Chemistry, 20. Math- ematics, 20. Mechanical drawing, 10. Letterwriting, 10. Education and training, 30.	\$600-900
Laboratory Assistant in Ceramics, Bu- reau of Standards	Over 18. No medical certificate.	N. and A.	Relative weight, 25. Required, grad- uation in ceramic engineering or ceramics.	General physics, 15. French or Ger- man, 10. Practical questions in ceramics, 50. Education, training and experience, 25.	\$900-1,200
Laboratory Assistant in Engineering, Bu- reau of Standards	Between 20 and 35.	A.	Relative weight, 50. Required, grad- uation in mechanical or civil engi- neering, with good training in math- ematics and physics. Experience in engineering laboratory desired.	General physics, 25. Experimental engineering, and theory of materials, 25. Education and experience, 50.	\$900-1,200
Material Engineer, Assistant, Bureau of Construction and Repair, Navy De- partment	20 or over. Medical certificate required.	A. and N.	Relative weight, 100. Must (a) have degree in engineering, and 3 years' subsequent experience in engineer- ing or as instructor in engineering or in physical laboratory work, or (b) have had 4 years' scientific course, and 4 years' subsequent similar experience. Should have reasonably thorough knowledge of one class of materials, natural aptitude for sys- tematic and scientific work, sound engineering judgment, and some executive ability.	General education and technical training, 40. General and special experience and fitness, 60.	\$5.04 and \$6 per diem

IN THE SERVICE OF THE U. S. GOVERNMENT

TABLE VII—Continued

TITLE OF POSITION	AGE AND PHYSICAL QUALIFICATIONS	APPORTIONMENT	EDUCATION, EXPERIENCE AND TRAINING	CONTENT OF EXAMINATION AND WEIGHTS OF SUBJECTS	SALARY
Mechanical Engineer, Office of Public Roads, Department of Agriculture	Over 30.	N.	Relative weight, 60. Required, education equivalent to graduation in mechanical engineering, and 5 years' additional practical experience, including conducting traction tests.	General education and technical training, 40. Practical experience and fitness, 50. Publications, 10.	\$3,000
Mechanical Engineer, Junior, Bureau of Mines	Under 30. Medical certificates required.	N.	Relative weight, 30. Graduate from 4 years' course in technical school or recognized college, larger portion of course in mechanical engineering.	Elementary chemistry and physics, 10. Essay on mechanical engineering subject accompanied by sketches, 20. Mechanics and dynamics of engineering, 10. Mechanical engineering, including testing of fuels, 30. Training and experience, 30.	(See footnote 4)
Mechanical Engineer, Junior, Grades 1 and 2, Interstate Commerce Commission	Between 21 and 35. Must be of good moral character, and temperate habits, free from color-blindness, and physically qualified to perform required duties. Males only.	Ordinarily only residents of districts appointed.	Relative weight, 50. Required, for Grade 1, 3 years' experience in mechanical engineering, of which 2 years must have been employment with manufacturers of locomotives, cars, air-brake equipment or shop equipment, or with mechanical department of steam railway. For Grade 2, 3 years' similar experience, of which 1 must have been with railway manufacturers, or mechanical department of railway. In either grade, graduation in mechanical engineering is equivalent to 2 years' experience.	Theory and practice of mechanical engineering as applied to railway rolling stock and other machinery, and the mathematics used in this branch of engineering, including algebra, geometry, and trigonometry, but not calculus, 50. Education, training and experience, 50.	Grade 1 \$1,200-1,680 Grade 2 \$720-1,080
Mechanical Engineer, Senior, Interstate Commerce Commission	Same as senior civil engineer.	Same as senior civil engineer.	Same experience required in this branch of engineering, as required of senior civil engineer.	Same, in respective line of engineering, as senior civil engineer.	\$1,800-2,700

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Mechanical Engineer, Senior, Grade 1, Interstate Commerce Commission	Between 30 and 50. Male. Must be physically qualified to perform duties. Of good moral character and temperate habits. Of good speech and manner, qualified to address and confer with railroad officials.	N. and A.	Relative weight, 100. Graduation in mechanical engineering, and 5 years' subsequent responsible experience, or if not graduate, 10 years' such experience.	Thorough technical training, and several years' practical experience in connection with the design, construction, operation and maintenance of railway machinery, motive power, and equipment, and thorough acquaintance with the methods of appraisal and cost-estimating of railway machinery and equipment.	\$3,000-4,800
Mechanical or Electrical Engineer, Junior, Engineer Department at Large	20 or over. Married or unmarried. No medical certificate.	N.	Relative weight, 25. Graduate in mechanical or electrical engineering, or 4 years' responsible experience in either.	Pure and applied mathematics, including calculus, 20. Construction and operation, general questions on mechanical and electrical engineering, 25. Theory and practice of (a) mechanical or (b) electrical engineering (advanced), 30. Training and experience, 25.	[See footnote 4]
Mechanical and Electrical Inspector, Navy Department	18 or over. No medical certificate required.	A. and N.	Relative weight, 40. Five years' experience in mechanical and electrical engineering. Degree in engineering considered equivalent to 2½ years' training.	Mathematics and practical calculations (including algebra, elementary mechanics, use of slide rule, working out results from formulae), 25. Theory and practice of mechanical and electrical engineering, comprising theory, nomenclature, practical computations, and construction and operation of simple machines, 35. Training and experience, 40.	\$5.72 a day
Mechanical Engineering Inspector, Quartermaster Corps of Army	20 or over.		Relative weight, 35. Three years' practical experience in mechanical engineering required. Graduation in engineering equivalent to 1 year.	Mathematics and practical calculations, 10. Drawing, 20. Theory and practice of mechanical engineering, 35. Training, experience and fitness, 35.	\$1,200-1,500
Metallurgical Engineer, Bureau of Mines	Between 25 and 40.	N. and A.	Relative weight, 70. Required, educational training equivalent to graduation from college, including courses in chemistry, physics and metallurgy, and 5 years' experience in metallurgy and operation of iron and steel mills.	General education and technical training, 30. Professional experience and fitness, 40. Publications or reports, 30.	\$3,000-4,000

IN THE SERVICE OF THE U. S. GOVERNMENT

TABLE VII—Continued

TITLE OF POSITION	AGE AND PHYSICAL QUALIFICATIONS	APPORTIONMENT	EDUCATION, EXPERIENCE AND TRAINING	CONTENT OF EXAMINATION AND WEIGHTS OF SUBJECTS	SALARY
Metallurgist, Chief, Bureau of Mines	Between 35 and 50.	N. and A.	Relative weight, 70. Required, educational training equivalent to graduation from a school of mines, and 5 years' practical experience in actual mining engineering and metallurgical practice.	General education and technical training, 30. Professional experience and fitness, 40. Publications or reports, 30.	\$4,000-4,800
Mineral Examiner, General Land Office	31 or over. Males. No medical certificate.	N. and A.	Relative weight, 25. Knowledge of geology, mineralogy, practical mining and land laws concerning mining claims expected. Graduate in mining engineering should qualify.	Spelling, 5. Arithmetic, 10. Penmanship, 5. Report-writing, 10. Practical questions in geology, mineralogy, mineral deposition, and surveying, 45. Education, training, and experience, 25.	\$1,320
Mine Sanitary Engineer, Bureau of Mines	Between 35 and 35.	N. and A.	Relative weight, 80. Required, graduation in engineering, including courses in sanitary engineering.	General education and technical training, 30. Technical and professional experience and fitness, 35. Experience evidencing knowledge of conditions in mining towns, 15. Publications or thesis on sanitary engineering or allied topics, 20.	\$1,800-2,400
Mine Tests Engineer, Associate, Bureau of Mines	Between 30 and 40. Male.	N. and A.	Relative weight, 80. Required, graduation in mining engineering or equivalent, 3 years' subsequent experience in testing structural materials and in computations, and 2 years' mining field work.	General education and technical training, 40. Professional experience and fitness, 40. Publications or reports, 20.	\$1,800-2,400
Mining Engineer, Bureau of Mines	Between 35 and 40.	N.	Relative weight, 50. Educational training equivalent to graduation in mining engineering, and 5 years' experience in coal or metal mining or both.	Education, 40. Professional experience, 40. Publications or reports, 20.	\$2,400-4,000

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Mining Engineer, Junior, Bureau of Mines	Under 30. Under 35 if N. experience in rescue and recovery work in mine disasters. Med- ical certificate re- quired.	N.	Relative weight, 30. Graduate from technical school or recognized col- lege, having taken 4-year course mainly in mining engineering.	Elementary chemistry and physics, 10. Mineralogy and geology, 10. Essay accompanied by sketches, on min- ing subject, 10. Mechanics and dynamics of engineering, 10. Min- ing operations, 30. Training and experience, 30.	(See footnote 4)
Mining Engineer, Coal or Metal	Under 45. No medical certificate.	N.	Relative weight, 80. Graduation from mining engineering course and 5 years' practical experience in (a) coal mining, or (b) metal mining. Ability as a writer required.	Education, 40. Professional experi- ence, 40. Publications or reports, 20.	\$2,400-4,000
Mining Engineer, Consulting, Bureau of Mines	Between 30 and 80. No medical certificate.		Relative weight, 65. Required, 10 years' experience as mining engineer in connection with gold mining operations, of which 5 years was in connection with gravel gold mining, including dredge mining, hydraulic mining, and drift mining. Degree in mining engineering accepted in lieu of 2 years' experience.	Education and experience, 65. Pub- lications or reports, 35.	\$3,000-3,600, or \$10 per day
Natural Gas Engineer	Between 31 and 40. No medical certificate.	N.	Relative weight, 80. Required, grad- uation in engineering and 2 years' experience in designing, construct- ing and operating natural gas-pro- ducing or transportation proper- ties.	Education, 30. Engineering experi- ence, 40. Publications, reports, or designs, 20.	\$1,800-3,500
Petroleum Engineer, Assistant	Between 31 and 40. No medical certificate.	N.	Relative weight, 70. Required, grad- uation in engineering and at least 2 years' experience in connection with the operation of petroleum proper- ties, including construction. Expe- rience in refineries, in pipe-line transportation, or in production problems, desired.	Education, 30. Engineering experi- ence, 40. Publications, reports, or designs, 30.	\$1,800-3,500
Physicist, Qualified in Mechanical, Civil or Electrical Engi- neering, Associate, Bureau of Stand- ards	Between 30 and 45.	A.	Relative weight, 75. Required, edu- cation equivalent to engineering degree. Desired, several years' practical experience, and ability for scientific research and study.	General education and scientific training, 35. Practical experience and fitness, 40. Publications or thesis, 25.	\$2,000-3,700

TABLE VII—Continued

TITLE OF POSITION	AGE AND PHYSICAL QUALIFICATIONS	APPORTIONMENT	EDUCATION, EXPERIENCE AND TRAINING	CONTENT OF EXAMINATION AND WEIGHTS OF SUBJECTS	SALARY
Pulp and Paper Engineer	Between 30 and 30. No medical certificate.	N.	Graduation in mechanical or chemical engineering from recognized college or university, and 3 years' experience in pulp and paper mills, or 4 years' of such experience, and laboratory research work sufficient to aggregate 8 years, 3 years of which shall have been responsible supervisory experience.	Education, 40. Experience, 60.	\$3,500
Radio Aid Expert, Navy Yards	36 or over for \$6 per day; 38 or over for \$8 per day. Medical certificate required.		Relative weight, 50. Required education equivalent to graduation in electrical engineering and for \$8 position, 5 years' experience in manufacture, or installation and adjustment of radio apparatus, 2 years of this in a position requiring original design or research work. For \$6 position, required, graduation in electrical engineering, and 3 years' experience in manufacture or installation radio apparatus.	Questions in general science, 10. Theoretical and practical questions in electrical and radio engineering, 40. General scientific education, and experience in the line of the required duties, 50.	\$6 and \$8 per day
Reclamation Service, Assistant Engineer	25 to 45. Physically sound. Medical certificate required.	N.	Relative weight, 40. Required, 4 years' experience in engineering or graduation in engineering and 2 years' experience.	Mathematics and applied mechanics, 25. Theory and practice of construction on land and in water, 20. Theory and practice of topographic and hydrographic surveying, 15. Training and experience, 40.	\$1,500
Sanitary Engineer, Philippine Service	Between 21 and 45. Medical certificate required.	N.	Relative weight, 30. Graduation in sanitary engineering, or 4 years' experience in sanitary engineering, required.	Mathematics, 30. Sanitary engineering, 40. Education and experience, 30.	\$1,600

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Sanitary Engineer, Public Health Service	Between 25 and 35.	N.	Relative weight, 80. Required, education equivalent to graduation in scientific course, including instruction in structural and sanitary engineering, sewage disposal and water supply, and 2 years' practical experience in chemistry, biology and engineering features of sewage purification.	General education and technical training, 40. Technical or professional experience and fitness, 40. Publications or thesis, 20.	\$2,000-\$2,500
Sanitary Engineer, Assistant, Public Health Service	Under 45. No medical certificate.	N.	Relative weight, 40. (a) Graduation from college with full courses in sanitary engineering, and 1 year subsequent laboratory or field experience; or (b) 5 years' experience in sanitary engineering; or (c) a combination of education and experience aggregating 5 years.	Practical questions in sanitary engineering, 40. Thesis, 20. Education and experience, 40.	\$1,600
Signal Engineer, Junior, Grades 1 and 2, Interstate Commerce Commission	Between 21 and 36. Must be of good moral character and temperate habits, free from color-blindness, and physically qualified to perform required duties.	Ordinarily only residents of districts appointed.	Relative weight, 60. Required, for Grade 1, 5 years' experience in railway signal engineering, of which 2 years must have been in the signal department of a railroad. For the other, 3 years' experience in designing, manufacturing or testing steam-railroad signaling apparatus, will qualify, provided it includes practical experience with railroad interlocking plants and automatic block signals. For Grade 2, 3 years' similar experience, of which 1 year must have been in the signal department of a railroad. In either grade, graduation from an engineering school is equivalent to 3 years' experience.	Theory and practice of railway signalling, including questions relating to block signals, interlocking plants, and the electrical equipment of signal apparatus, and the mathematics used in this branch of engineering, including algebra, geometry, and trigonometry, but not calculus, 50. Education, training and experience, 50.	Grade 1 \$1,200-1,680 Grade 2 \$720-1,080
Signal Engineer, Senior, Interstate Commerce Commission	Same as senior civil engineer.	Same as senior civil engineer.	Similar experience required in this branch of engineering, to that required of senior civil engineer.	Same in this line of engineering as senior civil engineer.	\$1,800-3,700
Steel Bridge Designer, Philippine Service	Between 25 and 4 Medical certificate required.		Relative weight, 100. Required, 4 years' general and special engineering experience, of which 2 years was in steel construction work, and 1 year in design.	General and technical education and fitness, 20. General engineering experience, 20. Special experience in steel-work design and construction, 60.	\$2,000-2,500

TABLE VII—Continued

TITLE OF POSITION	AGE AND PHYSICAL QUALIFICATIONS	APPORTIONMENT	EDUCATION, EXPERIENCE AND TRAINING	CONTENT OF EXAMINATION AND WEIGHTS OF SUBJECTS	SALARY
Structural Engineer, Junior, Grades 1 and 2, Interstate Commerce Commission	Between 21 and 30. Must be of good moral character and temperate habits, free from color-blindness, and physically qualified to perform required duties.	Ordinarily only residents of districts appointed.	Relative weight, 50. Required, for Grade 1, (a) 3 years' experience in structural or building engineering, of which 2 years must have been in railway structural or building engineering work, and the other 3 may have been in the design or construction of bridges or concrete or masonry structures, or (b) graduation in engineering and 2 years' structural engineering experience, of which 1 year must have been railway structural work. For Grade 2, (a) 2 years' experience in structural engineering work, or (b) completion of junior year in engineering in recognized technical school.	Theory and practice of the design and construction of timber, steel, concrete, and masonry bridges, buildings, and other structures, including foundations, and the mathematics used in this branch of engineering, including algebra, geometry, trigonometry, but not calculus, 50. Education, training and experience, 50.	Grade 1 \$1,200-1,680 Grade 2 \$720-1,080
Structural Engineer, Senior, Interstate Commerce Commission	Between 25 and 45. Must be physically qualified to perform duties.	N. and A. Ordinarily appointments made only from districts.	Relative weight, 100. Required, 4 years' preliminary training, or graduation in engineering, and 4 years' actual responsible practice in railway structural engineering.	General and technical education, and preliminary or apprenticeship training, 30. Responsible experience and fitness, 70.	\$1,800-2,700
Structural Engineer and Draftsman	23 or over. No medical certificate.	A. and N.	Relative weight, 30. Required, 5 years' practical experience in engineering, involving first-class building construction work. Degree in civil engineering accepted in lieu of 3 years.	Practical questions in engineering construction, 70. Training and experience, 30.	\$1,600-1,800
Surveyor or Transitman	19 or over. No medical certificate.	N.	Relative weight, 25. Required, one season in field in charge of party or as principal assistant, or two seasons in some subordinate position in surveying.	Mathematics (algebra, geometry and trigonometry), 15. Theory and practice of plane, topographic, and elementary geodetic surveying, 15. Public land surveying, 30. Adjustment and use of instruments, 15. Training and experience, 25.	Surveyor \$125-150 a month Transitman \$100-110 a month

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Telegraph and Telephone Engineer, Junior, Grades 1 and 2, Interstate Commerce Commission	Between 21 and 26. Must be of good moral character, temperate habits, free from color-blindness, and physically qualified to perform required duties. Males only.	Ordinarily only residents of districts appointed.	Relative weight, 80. Required, for Grade 1, 5 years' experience in actual telegraph or telephone engineering, including practical acquaintance with overhead and underground construction, and switchboard and office equipment. For Grade 2, 3 years' similar experience required. In either grade, graduation in electrical engineering is accepted as the equivalent of 2 years' experience.	Theory and practice of telegraph and telephone engineering, including overhead and underground construction, office equipment and systems of operation, and the mathematics used in this branch of engineering, including algebra, geometry and trigonometry, but not calculus, 50. Education, training and experience, 50.	Grade 1 \$1,200-1,680 Grade 2 \$720-1,080
Telegraph Engineer, Senior, Telephone Engineer, Senior, Interstate Commerce Commission	Same as senior civil engineer.	Same as senior civil engineer.	Relative weight, 100. Required, (a) 4 years of preliminary training or graduation in engineering, and (b) not less than 4 years of actual responsible practical experience in either telegraph or telephone engineering or construction.	General and technical education, and preliminary or apprenticeship training, 30. Responsible experience and fitness, 70.	\$1,800-2,700
Senior Telegraph and Telephone Engineer, Grade 1, Interstate Commerce Commission	Each of these must be otherwise qualified same as senior mechanical engineer.	N. and A.	Same in respective line as senior mechanical engineer, Grade 1.	Same in respective line as senior mechanical engineer, Grade 1.	\$3,000-4,800
Telephone Engineer, Forest Service	Between 28 and 45. Medical certificate required. Physically strong.	N.	Relative weight, 60. Required, 6 years' actual experience in construction, maintenance and inspection of telephone lines for operating systems employing most approved methods. Special credit for construction of tree-lines and construction peculiar to forested regions. Credit given for technical training at school. Must have had some administrative experience.	Practical questions relating to plant construction with special reference to initial cost, cost of maintenance and reliability and efficiency of communication, 40. Training and experience, 60.	\$1,800
Tests Engineer, Office of Public Roads and Rural Engineering, Department of Agriculture	Under 50. No medical certificate.	N.	Relative weight, 90. Required, graduation in mechanical or civil engineering, and 5 years' subsequent experience, including 2 years in testing materials of construction.	Education, 40. Experience, 50. Thesis or reports, 10.	\$3,250

TABLE VII—*Concluded*

TITLE OF POSITION	AGE AND PHYSICAL QUALIFICATIONS	APPORTIONMENT	EDUCATION, EXPERIENCE AND TRAINING	CONTENT OF EXAMINATION AND WEIGHTS OF SUBJECTS	SALARY
Topographer, International Boundary Commission	Over 25. Physically qualified. Medical certificate required.	N.	Relative weight, 100. Required, (a) 4 years' general experience in engineering or surveying, or graduation from a technical school, and (b) 3 years' responsible experience in topographic or geodetic surveying and in purchasing camp supplies and keeping accounts.	Preliminary training and experience, 30. Responsible experience in topographic and geodetic surveying and fitness, 70.	\$2,100

\*The salaries for these positions were not given in the U. S. Civil Service *Manual of Examinations for the Fall of 1916*, from which the qualifications for these particular positions were taken for this table.





TABLE VIII

## QUALIFICATIONS REQUIRED FOR APPOINTMENTS TO DRAFTSMAN POSITIONS. FEDERAL CIVIL SERVICE

TITLE OF POSITION	AGE, SEX, PHYSICAL QUALIFICATIONS	APPOINTMENT	EDUCATION, TRAINING AND EXPERIENCE	CONTENT OF EXAMINATION AND WEIGHT OF SUBJECTS	SALARY
Aeronautic Draftsman	Over 20. Men only. No medical certificate.	N.	Relative weight, 100. Required, 2 years' college work in engineering, 1 year's experience as mechanic or fixer in a machine shop, mill, or factory, and at least 3 years in office drafting, six months of which was in connection with aeronautics.	General education and technical training, 40. Practical experience, 60.	\$5.04 per day
Aeronautic Mechanical Draftsman	Over 20. Men only. No medical certificate.	A.	Relative weight, 85. Required, 1½ years' experience in design, including not only mechanical drawing, but also strength calculations, either in aeroplanes or automobile factory. Special credit given to mechanical engineering graduates with practical experience in above lines of design.	General education, 25. Technical training and experience, 60. Practical tests, rated on drawings submitted, 15.	\$1,200-1,800
Architectural and Structural Steel Draftsman	Over 22. Male. No medical certificate.	N. and A.	Relative weight, 25. Required, 5 years' experience in engineering work or drafting. Graduation from technical college considered equivalent to 3 years.	Mathematics, pure and applied, 20. Topographic and hydrographic surveying, 15. General building and steel, construction and drawing, 40. Training and experience, 25.	\$1,600
Electrical Draftsman, Navy Department	Over 18. Male. No medical certificate.	N. and A.	Relative weight, 100. Required, equivalent of high school education, and 4 years' practical experience, 2 of which were in marine electrical drafting; or graduation in engineering, and 1 year's experience in marine electrical drafting.	Education and preliminary apprenticeship training, 40. Experience, 60.	\$3.50-6.00 a day
Electrical Draftsman, Navy Department	Over 22. Male. No medical certificate.	N. and A.	Relative weight, 40. Required, equivalent of high school education, and 4 years' practical experience, 2 of which were in marine electrical drafting; or graduation in engineering, and 1 year's experience in marine electrical drafting.	Mathematics, 10. Electrical machinery and materials, 20. Drawing and design, 30. Education, training and experience, 40.	\$4 a day

Electrical Draftsman, Radio	Over 22. Male.	N. and A.	Relative weight, 50. Required, equivalent of high school education, and 4 years' experience as draftsman, of which 2 were in design and detailing radio apparatus, writing up specifications for the same, preparation of estimates for, and writing description covering the manufacture, installation, care and maintenance of outfit.	Mathematics, 10. Electrical machinery and materials, 15. Drawing and design, 25. Education, training, and experience, 50.	\$4 a day
Electrical Engineer and Draftsman, Treasury Department	Over 22. Male. No medical certificate.	No A.	Relative weight, 35. Required, equivalent of high school education and 3 years' experience as draftsman, principally in connection with electrical work, and illuminating engineering, or graduation from technical school with 6 months' experience as electrical draftsman, or in installation work.	Theoretical and practical questions in electrical science, with special reference to lighting and elevator work in public buildings, 25. Drawing and design, 40. Training and experience, 35.	\$1,200
Heating and Ventilating Engineer and Draftsman, Treasury Department	Over 18. Men only. No medical certificate.	A.	Relative weight, 30. Required, 4 years' experience in designing or installation of heating and ventilating system in large buildings. Graduation in heating and ventilating engineering accepted as 2½ years' experience.	Practical questions in heating and ventilating, 35. Drawing and design (plans for heating and ventilating modern public buildings), 35. Training and experience, 30.	\$1,200
Hull Draftsman	Over 20. Male.	A.	Relative weight, 25. Required, 10 years' experience as ship draftsman, and some experience in dredge design. Graduation from technical college accepted as 5 years' experience.	Ship calculations, 20. Practical ship-building, 20. Ship-drafting, 35. Training and experience, 25	\$1,800
Marine Draftsman, Bureau of Light-houses	Over 22. Male. No medical certificate.	No A.	Relative weight, 40. Required, graduation in engineering, and 3 years' experience as draftsman on marine engine, or piping or ship work, or high school education, and 5 years' experience, 3 of these in similar drafting.	Mathematics, including geometry, plain trigonometry and logarithms, 10. Practical questions on practice of engine and boiler design, and arrangement of piping systems, including drawing, 50. Education, training and experience, 40.	\$1,440
Marine Engine and Boiler Draftsman, Navy Department	Over 18. Men only.	N. and A.	Relative weight, 90. Required, graduation from technical college, or 3 years' experience in marine engineering or allied work, 2 years of this in drafting room. Considerable experience required for higher salaries.	Physical ability, 10. Education, training, and experience, 90.	\$3.28-7.04 a day

TABLE VIII—Concluded

TITLE OF POSITION	AGE, SEX, PHYSICAL QUALIFICATIONS	APPOINTMENT	EDUCATION, TRAINING AND EXPERIENCE	CONTENT OF EXAMINATION AND WEIGHT OF SUBJECTS	SALARY
MarineEngineDraftsman for Submarines	Over 22. Male. No medical certificate.	N.	Relative weight, 40. Required, 2 years' education in engineering and 2 years' drafting practice, or 4 years' experience, 1 year of this in office drafting. Experience in design of construction of submarine machinery is necessary.	Mathematics, 15. Materials, details and specifications, 20. Drawing and design, 25. Education, training and experience, 40.	\$4-5.04 a day
Mechanical Draftsman, War Department	Over 18. Male. No medical certificate.	A.	Relative weight, 80. Required, (a) 3 years' experience as mechanical draftsman in addition to good general education, or (b) graduation from technical school.	General education, 20. Technical training and experience, 60. Practical tests rated on drawings submitted, 20.	\$1,000-1,200
Mechanical Draftsman, Ordnance Department	Over 18. Male. No medical certificate.	N.	Relative weight, 80. Required, equivalent of high school education, and 2 years' experience as draftsman, of which 1½ years were in the drafting and design of telescopic instruments or optical instruments of similar character.	General education, 20. Technical training and experience, 60. Practical tests rated on drawings submitted, 20.	\$1,320
Mining Draftsman	Over 21. Men only. No medical certificate.	N.	Relative weight, 30. Experience in mining, drafting, and preparation of illustrations required. Two years such training minimum.	Elementary mining practice, 30. Drawing (preparation of drawings suitable for publication from sketches, drawings, or descriptions relating to mines), 40. Training and experience, 30.	\$1,020-1,200
Ordnance Draftsman, Navy Department	20 or over. Male. No medical certificate.	N.	Relative weight, 100. For positions paying up to \$4.24 per day, required, 2 years' course in engineering and 2 years' practical drafting, or equivalent or complete course in machine design and drawing and 1 year drafting-room experience. For positions paying \$4.48 per day, or over, required, equivalent of completed course in engineering, and 2 years' drafting-room experience, or full course in machine design and drawing, and 2 years' drafting experience, 1 year of this in design.	Education, 40. Experience and fitness, 60.	\$3.28-7.04 a day

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	Ship Draftsman, Navy Department	18 or over. Male.	N. and A.	Relative weight, 90. Must be graduate of or senior student in technical school, or have had 3 years' experience in ship or allied work, 2 years of this in the drafting room. Considerably more experience required for higher salaries.	Physical ability, 10. Education, training, and experience, 90.	\$3.28-7.04 a day
	Skilled Draftsman, Ordnance Department	Between 25 and 45 Male. Medical certificate required.	N. and A.	Relative weight, 100. Required, high school education or equivalent; 4 years' experience in design and construction of (a) ordnance material, turrets, etc., or (b) of structural steel work or mechanical engineering designing; and must have been part of the time in charge of designing work over other draftsmen.	General and technical education and preliminary or apprenticeship training, 40. Experience and fitness, 60.	\$1,400-2,000
	Structural Engineer and Draftsman, Office of Supervising Architect	Over 23. Male. No medical certificate.	N. and A.	Relative weight, 90. Required, 5 years' experience, of which 2 years were in steel designing or construction work; civil engineering degree is accepted as 2 years' experience.	Practical questions in engineering construction, particularly fireproofing, waterproofing and designing in steel and reinforced concrete, including foundation, 70. Training and experience, 30.	\$1,800
71	Structural Steel Draftsman, Navy Department	Over 22. Male. No medical certificate.	N. and A.	Relative weight, 100. Required, high school education or equivalent; 3 years' preliminary experience and not less than 2 years in responsible work in structural steel, design and construction; graduation in engineering accepted as 2 years' preliminary experience.	Education and preliminary or apprenticeship training, 40. Experience, 60.	\$4-8 a day
	Surveyor-Draftsman	Between 21 and 45. Male. No medical certificate.	N.	Relative weight, 25. Required, 5 years' field and office experience, at least 2 of these in field work, or graduation in civil engineering with 2 years' experience, 1 year in field work. Experience in cadastral and topographic surveying, and in plotting field notes and making finished maps for photolithographing, is necessary.	Plane surveying, use and adjustment of instruments and United States public land surveying, 15. Topographic surveying, 15. Mathematics to and including analytics, 15. Topographic drawing and lettering, 30. Training and experience, 25.	\$1,200-1,600
•	Topographic and Sub- surface Draftsman, Navy Yard	Over 21. Male. No medical certificate.	N.	Relative weight, 100. Required, 4 years' experience in engineering and surveying, of this 6 months must have been special work in underground surveying; graduation in engineering is equivalent to the general experience.	Education and general engineering experience, 70. Special experience in underground service, surveying and mapping, 30.	\$4.48-5.04 a day



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### THE ENGINEER IN PUBLIC SERVICE

BY

FREDERICK E. BREITHUT

PART II

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78. OCTOBER—The Engineer in Public Service: Part I. (71 pp.) 75 cents.

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### THE ENGINEER IN PUBLIC SERVICE

BY

FREDERICK E. BREITHUT

#### PART II

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# THE ENGINEER IN PUBLIC SERVICE

## PART II

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### CHAPTER III

#### THE ENGINEER IN THE SERVICE OF NEW YORK STATE

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The same confusion with regard to titles which was noted in the federal service exists in the service of New York State. It may be, therefore, that some titles which should have been included in the data which follow, have been omitted.<sup>1</sup> Possibly some which have been included should have been left out. The only way to settle the question would be to appraise each position individually. This would involve an expenditure of energy incommensurate with the end to be attained. The picture of the engineering service of New York State as here presented is believed to be sufficiently correct for all practical purposes.

As in Chapter II, Part I, only technical engineering positions are considered.

Positions in the Public Service Commission, 1st District, are under the jurisdiction of the State Civil Service Commission. On the other hand, the work of this commission is confined to New York City as contrasted with that of the Public Service Commission, 2nd District, which includes the rest of New York State. The employes of the Public Service Commission, 1st District, with the exception of the commissioners, counsel and secretary, are paid by the City of New York.<sup>2</sup> On the whole, therefore, it has seemed advisable to treat the Public Service Commission, 1st District, as a department of the City of New York rather than of the State. If, for any reason, one wants to consider it along with the State service, it is only necessary to transfer the data given

---

<sup>1</sup> The inspectional service, especially, has certain positions which call for engineering qualifications.

<sup>2</sup> Chapter 572, of the Laws of 1916, provides for payment of a number of other employes by the State, beginning July 1, 1917.

in Chapter IV to this Chapter and to make the corresponding additions and subtractions.

*Number of Engineering Positions, State of New York*

Within the limits stated, there were, on March 27, 1916, 1,073 engineering positions in the New York State service.

TABLE IX shows the number of engineering positions under each title in each State department and the total number for each title and each department. By reading from left to right, the total number for each title is obtained; by reading from top to bottom, the total number for each department.

There are 47 distinct titles in the list.

TABLE X gives the titles, numbers and individual salaries for the whole New York State service.

TABLE XI contains a summary giving the number of engineering positions in each department.

TABLE XII gives the numbers at each rate of pay and the total salaries at each rate.

This table shows that the State of New York (omitting Public Service Commission, 1st District) is paying \$1,757,915 per annum in salaries for its engineering service. Summarizing the data given in TABLE XII and rearranging in terms of salary, number and percentages, we obtain the following:

SALARY	NUMBER	PER CENT
\$900-\$1,000	72	6.7
1,001- 1,500	594	55.4
1,501- 2,000	177	16.5
2,001- 2,500	162	15.1
2,501- 3,000	41	3.8
3,001- 3,500	6	.6
3,501- 4,000	10	.9
4,001- 8,000	11	1.0
Total	1,073	100.0

It will be seen that 87 per cent of these salaries lie in the region between \$1,000 and \$2,500.

If, following the same method adopted in Chapter II, we regard \$3,000 or over per annum, as a fair measure of the "successful" engineer, we find the following:

IN THE SERVICE OF NEW YORK STATE

SALARY	NUMBER	PER CENT
Below \$3,000	1,019	95.0
\$3,000 or over	54	5.0
Total	1,073	100.0

*The Qualifications Required for Appointment*

Having completed the picture of the present constitution of the New York State engineering service, the next questions before us are those of the probable number of vacancies and the qualifications usually called for in filling positions.

TABLE XIII shows the number of appointments made to engineering positions in New York State during the years 1910-1915.

TABLE XIV contains a summary of the engineering examinations of recent years, giving the title, qualifications, relative weights, content of examinations and weights of subject, and salaries.

TABLE XV gives similar data for the drafting positions.

*Sources of Information*

The information contained in the foregoing tables was obtained from the following sources:

TABLES IX, X, XI, and XII were compiled from the information given in the Civil List of the State of New York, which constitutes Volume I of the Thirty-Third Report of the New York State Civil Service Commission (of date March 27, 1916).

TABLE XIII was obtained from the annual reports of the New York State Civil Service Commission for the years 1911-1915.

TABLES XIV and XV were compiled from the examination announcements of the New York State Civil Service Commission of recent years.

*Statement of Civil Service Commission*

Relative to the more general aspects of the New York State engineering service, the following is quoted from a pamphlet<sup>1</sup> issued by the New York State Civil Service Commission in 1914:

<sup>1</sup> Leaflet L, New York State Civil Service Commission, "Examinations for Engineering Positions."

"Engineering positions in the New York State service are with few exceptions classified as competitive; that is, appointments to them are made from names certified in their order of standing on registers of eligibles established from competitive examinations. As a rule examinations are general and the same lists are certified to all departments. The line of questioning, however, is influenced somewhat by the demand for eligibles in the different departments concerned.

"The Civil Service Commission has only incidental knowledge of vacancies, present or prospective. It furnishes no information with respect to prospects of appointment, other than that occasionally given in the advertisement of examinations, nor does it undertake to predict the date of examinations in advance of their regular announcement. Examinations are held only upon the demand of departments for certification of eligibles for positions for which there is no list, or in the case of positions of the lower grades to which appointments are frequent, when it appears that the existing register of eligibles will shortly be exhausted.

"In general, positions in the State service are open only to citizens and residents of New York State. However, nonresidents have been admitted to recent examinations for the grade of Junior Engineer and above; and some positions in structural drafting and designing have been open to noncitizens. In this, as in other respects, the requirements for admission vary from time to time, as the exigencies of the service may require.

"Appointments to positions worth more than \$1,500, in departments which have a considerable organization, are usually made by promotion, from lists obtained by competitive examinations restricted to those in the department serving in lower grades.

"The examinations consist of written exercises graded in accordance with a more or less fixed schedule, and ratings of age, education, experience, and in the higher grades, of personality, in so far as it may be determined by oral interviews and inquiry of former employers or associates. Standards of marking are effected to a considerable extent by the average quality of candidates, and the proportion of applicants to vacancies. The different subjects are given relative weights which represent their comparative importance or value in the examination. In computing the average or final standing, the mark for each subject is multiplied by its weight, and the sum of these products divided by the sum of the weights. No average standing is computed unless the competitor obtains at least 60 per cent, in each subject



of the examination. In the general average, 75 per cent, is the minimum passing mark."

With regard to the questions of salary plan, rate of advancement and promotion, in the engineering service of New York State, Mr. John C. Birdseye, Secretary of the New York State Civil Service Commission, states:<sup>1</sup>

"There is no direct salary plan in effect at present. There is no fixed rate of advancement. In the Department of the Public Service Commission for the First District in the engineering staff there is a plan in force by which there are written promotion examinations for every other grade, the intervening grade being covered by an unwritten efficiency record rating."

As to other promotions the scheme is as follows:<sup>1</sup>

"If the promotion involves merely an increase in salary without change in duties, it may be allowed one grade without examination, provided there are not more than three to compete. If more than three then promotion examination is held based on practical test and rating for efficiency, etc., furnished by the appointing officer. If the promotion involves an increase in salary and change of duties, same is competitive if there are more than three eligible to compete, but non-competitive if less than three. In competitive promotion examinations eligible lists are established and names certified to the appointing officer, the same as in open competitive examinations. Promotion examinations start with the appointing officer, and the character and scope of the same is arranged between the appointing officer and our Chief Examiner. This Commission determines who is eligible. The scheme concerning promotion examination is identical with that relating to open competitive examination except that candidates for promotion are limited to those in the department who served in the next lower grade for six months, and the examination instead of being somewhat general in character is aimed at the specific duties of the position to which promotion is sought. In promotion examinations however, the general efficiency, character and good conduct of a candidate is rated."<sup>2</sup>

The actual manner in which advancement and promotion has worked out in recent years may be gathered by consulting the following table:<sup>3</sup>

<sup>1</sup> Quoted from a letter dated October 28, 1916.

<sup>2</sup> Mr. Birdseye has been very kind in helping to present the facts regarding the engineering service of New York State.

<sup>3</sup> Quoted from the First Report of the Senate Committee on Civil Service, New York State, 1916, page 924.

**RATE OF PROMOTION AND SALARY INCREASE**  
**LENGTH OF SERVICE PER CIVIL SERVICE GRADE—ENGINEERS**

*Summary table showing the average length of completed service,\* in months, in each Civil Service Grade, for employees of the Engineer Group in the departments of Highways, State Architect and State Engineer, based on service records from January 1, 1910, to June 30, 1915†*

	Grade 1	Grade 2	Grade 3	Grade 4	Grade 5	Grade 6	Grade 7	Grade 8	Grade 9	Grade 10	Grade 11	Departmental averages	
	\$390	\$361- \$480	\$481- \$600	\$601- \$720	\$721- \$900	\$901- \$1,300	\$1,301- \$1,500	\$1,501- \$1,800	\$1,801- \$2,100	\$2,100- \$2,400	\$2,401- \$3,000	Average of all grades	Average of grade 6 to 10 inclusive
<i>Highway</i>													
Number of instances				17	52	66	98	71	27	6	2		
Number of months of service				221	776	1,454	1,385	1,385	445	288	37		
Average number months of service				13	14.9	16.6	14.1	18.1	16.5	32	18.5	17.8	19.3
<i>State Architect</i>													
Number of instances						1(1)	3	1(1)	3	2			
Number of months of service						(37)	47	(14)	34	60			
Average number months of service						(37)	15.7	(14)	11.3	30		21.6	21.6
<i>State Engineer</i>													
Number of instances				10	54	65	34	40	48	6	1(1)		
Number of months of service				232	899	1,027	688	840	1,035	88	(36)		
Average number months of service				19.2	11.1	16.3	20	21	21.6	14.7		16.7	18.7
<i>Grade Average</i>													
Average number months of service				19.5	13	22.9	16.6	17.7	16.5	25.6	1(18.5)		
<i>Average of the Departments of Highways and State Engineer</i>													
				19	13	16	17	19.5	19.1	23.3	1(18.5)		

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\*"Completed service": i. e., service terminated by promotion to the next grade. The inclusion of service not yet so terminated, or of service ended by separation from the Civil Service or by transfer from the department, would, of course, bias a figure intended to represent rate of promotion.  
†The records of employees who left the service or were transferred from the departments do not appear in the Civil Service department records, so consequently are not included in these figures.  
‡Only one instance appears in the departmental averages.

The proposed scheme of standardization of engineering employments in the New York State service will be found in Chapter V.

The general discussion of the data presented in this chapter and the conclusions reached are contained in Chapter VI.

**TABLE IX**  
**ENGINEERS IN THE SERVICE OF NEW YORK STATE, MARCH 27, 1916**

	DEPARTMENT OF ARCHITECTURE	BROOK PARKWAY COMMISSION	CONSERVATION COMMISSION	ENGINEER AND SURVEYOR	DEPARTMENT OF HEALTH	HIGHWAY COMMISSION	INDUSTRIAL COMMISSION	NAUTICAL SCHOOL	BD. OF GOVERNORS	FALGHADES PARK COMMISSION	DEPT. OF PUBLIC BUILDINGS	PUBLIC SERVICE COMMISSION 2ND DEPT.	UNIVERSITY OF THE STATE OF N. Y.	ERIE COUNTY	KINGS COUNTY	MONROE COUNTY	NEW YORK COUNTY	ONONDAGA COUNTY	QUEENS COUNTY	VILLAGE OF FORT CHESTER	TOTALS	
Architectural Draftsman	15																					15
Asst. Chief Engineer											1											1
Asst. Civil Engineer	1	2	4																			8
Asst. Engineer			1	115			288															404
Asst. Sanitary Engineer					4																	4
Asst. Surveyor and Draftsman																						1
Axeman		2															1					2
Bridge Designer				15			1															16
Bridge Draftsman				1																		1
Chainman			1	33			31															65
Chemical Engineer							1															1
Chief Draftsman	1																					1
Chief Engineer					1		1	1	1	1	1	1										6
Chief Gas Engineer																						1
Chief Surveyor and Draftsman				1													1					1
Civil Engineer				1			1					1										3
Consulting Engineer				1																		1
County Engineer														1		1						2

THE ENGINEER IN PUBLIC SERVICE

Division Engineer			1	3		9															13
Draftsman							2														14
Draftsman and Building Inspector	1																				1
Draftsman (Engineering)																					1
Electrical Engineer	1									1											2
Engineer				1						1	2										5
Engineer and Secretary		1																			1
Engineer and Surveyor				1																	1
Engineering Draftsman				22		14					1										37
Fire Prevention Engineer							2														2
First Assistant Engineer						26															26
Heating Engineer	4																				4
Instrumentman									1												1
Junior Assistant			4																		4
Junior Asst. Engineer				10																	10
Junior Bridge Draftsman				4																	4
Junior Engineer			2																		2
Landscape Draftsman	1																				1
Leveler	2	1	42		111															4	160
Map Draftsman	2	1																			3
Mechanical Draftsman				1																	1
Mechanical Engineer and Draftsman				1																	1
Principal Asst. Engineer					1										1						2
Resident Engineer				15		16															31
Rodman		1	2	57		145															205
Sanitary Draftsman	1																				1
Sanitary Engineer	1																				1
Structural Engineer	2																				2
Transitman		1																			1
	27	12	17	323	6	641	8	1	2	4	6	1	1	2	3	11	4	3	1		Grand Total
																					1,073

IN THE SERVICE OF NEW YORK STATE

THE ENGINEER IN PUBLIC SERVICE

TABLE X  
ENGINEERS IN THE SERVICE OF NEW YORK STATE,  
MARCH 27, 1916

DEPARTMENT	TITLE	NUMBER	SALARIES	
<i>Department of Architecture</i>	Structural Engineer	2	1 @ \$1,900 1 @ 2,000	
	Sanitary Engineer	1	1 @ 2,150	
	Electrical Engineer	1	1 @ 1,800	
	Heating Engineer	4	1 @ 1,800 1 @ 1,900 2 @ 2,500	
	Assistant Civil Engineer	1	1 @ 1,800	
	Chief Draftsman	1	1 @ 3,000	
	Sanitary Draftsman	1	1 @ 1,800	
	Draftsman and Building Inspector	1	1 @ 1,800	
	Architectural Draftsman	15	2 @ 1,000 5 @ 1,200 1 @ 1,350 1 @ 1,400 1 @ 1,000 2 @ 1,700 2 @ 1,800 1 @ 2,800	
	Total	27		
	<i>Bronx Parkway Commission</i>	Engineer and Secretary	1	1 @ \$7,500
		Assistant Civil Engineer	2	1 @ 2,400 1 @ 2,700
		Map Draftsman	2	1 @ 1,350 1 @ 1,500
		Landscape Draftsman	1	1 @ 1,200
		Transitman	1	1 @ 1,440
Leveler		2	2 @ 1,200	
Rodman		1	1 @ 900	
Axeman		2	2 @ 900	
Total		12		
<i>Conservation Commission</i>	Division Engineer	1	1 @ \$4,000	
	Assistant Engineer, water power, storage and drainage	1	1 @ 2,000	
	Assistant Civil Engineer	4	1 @ 1,900 2 @ 2,000 1 @ 2,000	
	Junior Engineer	2	1 @ 1,350 1 @ 1,500	
	Map Draftsman	1	1 @ 1,500	
	Leveller	1	1 @ 4.50 a day	
	Junior Assistant	4	2 @ 3.50 " 2 @ 9.00 "	
	Rodman	2	1 @ 3.50 " 1 @ 4.00 "	
	Chainman	1	1 @ 900	
	Total	17		
	<i>Engineer and Surveyor</i>	Engineer and Surveyor	1	1 @ \$8,000
Division Engineer, eastern, middle and western division		2	2 @ 4,800	
Consulting Engineer		1	1 @ 7,200	
Civil Engineer of Grade Crossing		1	1 @ 2,700	
Engineer of Claims		1	1 @ 4,200	

IN THE SERVICE OF NEW YORK STATE

TABLE X—Continued

DEPARTMENT	TITLE	NUMBER	SALARIES	
<i>Engineer and Surveyor Cont.</i>	Assistant Engineer of Claims	1	1 @ \$3,000	
	Resident Engineer	15	15 @ 3,000	
	Junior Assistant Engineer	10	10 @ 1,080	
	Mechanical Engineer and Draftsman	1	1 @ 2,400	
	Assistant Engineer	114	3 @ 5.00 a day 27 @ 6.00 " 94 @ 7.00 "	
	Leveler	42	12 @ 4.50 " 30 @ 5.00 "	
	Rodman	57	12 @ 3.50 " 45 @ 4.00 "	
	Chainman	33	33 @ 3.00 "	
	Bridge Designer	15	3 @ 1,500 2 @ 1,800 5 @ 2,100 5 @ 2,400	
	Engineering Draftsman	22	2 @ 4.50 a day 19 @ 5.00 " 1 @ 5.00 "	
	Bridge Draftsman	1	1 @ 1,201	
	Junior Bridge Draftsman	4	1 @ 901 1 @ 1,000 2 @ 1,200	
	Mechanical Draftsman	1	1 @ 1,800	
	Total		323	
	<i>Department of Health</i>	Chief Engineer	1	1 @ \$4,500
		Principal Assistant Engineer	1	1 @ 3,000
		Assistant Sanitary Engineer	4	4 @ 2,000
		Total		6
	<i>Highway Commission</i>	Division Engineer	9	9 @ \$4,000
		Resident Engineer	16	3 @ 2,400 4 @ 2,500 3 @ 2,700 5 @ 2,800
		Assistant Engineer	73	1 @ 3,000 5 @ 1,800 40 @ 2,000 1 @ 2,100 24 @ 2,200
Bridge Designer		1	1 @ 2,100	
Engineering Draftsman		14	1 @ 1,301 3 @ 4.00 a day 2 @ 4.50 " 9 @ 5.00 "	
First Assistant Engineer		26	26 @ 7.00 "	
Assistant Engineer		215	139 @ 5.00 " 31 @ 5.50 " 45 @ 6.00 " 37 @ 5.00 " 116 @ 3.50 " 22 @ 4.00 " 1 @ 11.00 "	
Leveler		111	84 @ 6.00 " 27 @ 5.00 "	
Rodman		145	116 @ 3.50 " 22 @ 4.00 " 1 @ 11.00 "	
Chainman		31	31 @ 3.00 "	
Total			641	
<i>Industrial Commission</i>		Chief Engineer, bureau of fire hazards, boiler and explosives	1	1 @ \$3,500
		Fire Prevention Engineer	2	2 @ 3,500
		Chemical Engineer	1	1 @ 3,500
		Total		4

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TABLE X—Continued

DEPARTMENT	TITLE	NUMBER	SALARIES
<i>Industrial Commission— Cont.</i>	Civil Engineer and Expert in Building Construction	1	1 @ \$3,500
	Draftsman, Engineering	1	1 @ 1,900
	Draftsman	2	1 @ 1,200 1 @ 1,500
	Total	8	
<i>Nautical School, Board of Governors</i>	Chief Engineer	1	1 @ \$2,500
	Total	1	
<i>Paleontological Commission</i>	Chief Engineer	1	1 @ \$5,000
	Instrumentman	1	1 @ 1,440
	Total	2	
<i>Department of Public Buildings</i>	Chief Engineer	1	1 @ \$3,000
	Assistant Chief Engineer	1	1 @ 1,500
	Electrical Engineer	1	1 @ 1,512
	Engineer	1	1 @ 1,210
	Total	4	
<i>Public Service Commission— Second District</i>	Chief Engineer, Division of Light, heat and power	1	1 @ \$5,000
	Engineer, grade crossing	1	1 @ 4,500
	Chief Gas Engineer	1	1 @ 3,000
	Engineer, Division of Telegraph and Telephone	1	1 @ 2,800
	Civil Engineer	1	1 @ 2,000
	Engineering Draftsman	1	1 @ 1,400
	Total	6	
<i>University of The State of New York</i>	Draftsman	1	1 @ \$1,800
	Total	1	
<i>Kings County Engineer</i>	Draftsman	2	2 @ \$1,200
	Total	2	
<i>Richmond County Engineer</i>	County Engineer	1	1 @ \$3,120
	Total	1	
<i>Monroe County Engineer</i>	County Engineer	1	1 @ \$3,000
	Assistant Civil Engineer	1	1 @ 2,400
	Principal Assistant Engineer	1	1 @ 8.00 a day
	Total	3	



IN THE SERVICE OF NEW YORK STATE

TABLE X—*Concluded*

DEPARTMENT	TITLE	NUMBER	SALARIES
<i>New York County Engineer</i>	Chief Surveyor and Draftsman	1	1 @ \$2,100
	Assistant Surveyor and Draftsman	1	1 @ 1,500
	Draftsman	9	7 @ 1,200 2 @ 1,350
	Total	11	
<i>Onondaga County Engineer</i>	Leveler	4	1 @ \$1,200 2 @ 1,320 1 @ 1,440
	Total	4	
<i>Queens County Engineer</i>	Map Draftsman	3	2 @ \$1,200 1 @ 1,500
	Total	3	
<i>Village of Port Chester, Board of Trustees</i>	Engineer	1	1 @ \$3,000
	Total	1	
	Grand Total	1,073	

TABLE XI  
NUMBER OF ENGINEERING POSITIONS IN EACH DEPARTMENT—  
NEW YORK STATE SERVICE

	DEPARTMENTAL TOTAL
Department of Architecture	27
Bronx Parkway Commission	12
Conservation Commission	17
Engineer and Surveyor	323
Department of Health	6
Highway Commission	641
Industrial Commission	8
Nautical School, Board of Governors	1
Palisades Park Commission	2
Department of Public Buildings	4
Public Service Commission, Second District	6
University of the State of New York	1
County Engineer (Erie)	1
County Engineer (Kings)	2
County Engineers (Mourne)	3
County Engineer (New York)	11
County Engineer (Onondaga)	4
County Engineer (Queens)	3
Village of Port Chester (Board of Trustees)	1
	1,073

THE ENGINEER IN PUBLIC SERVICE

TABLE XII  
NUMBER OF ENGINEERING POSITIONS AT EACH RATE OF PAY—  
NEW YORK STATE

NUMBER	ANNUAL SALARY	TOTAL SALARIES	NUMBER	ANNUAL SALARY	TOTAL SALARIES
3	\$900	\$2,700	46	\$2,000	\$92,000
1	901	901	8	2,100	16,800
1	960	960	1	2,150	2,150
3	1,000	3,000	24	2,200	52,800
10	1,080	10,800	11	2,400	26,400
1	1,100	1,100	7	2,500	17,500
23	1,200	27,600	5	2,700	13,500
2	1,201	2,402	7	2,800	19,600
1	1,210	1,210	27	3,000	81,000
2	1,320	2,640	1	3,180	3,180
5	1,350	6,750	5	3,500	17,500
1	1,400	1,400	10	4,000	40,000
4	1,440	5,760	1	4,200	4,200
10	1,500	15,000	2	4,500	9,000
1	1,600	1,600	3	4,800	14,400
2	1,700	3,400	2	5,000	10,000
21	1,800	37,800	1	7,200	7,200
1	1,812	1,812	1	7,500	7,500
2	1,900	3,800	1	8,000	8,000

NUMBER	DAILY WAGE	EQUIVALENT ANNUAL SALARY <sup>1</sup>	TOTAL SALARIES	NUMBER	DAILY WAGE	EQUIVALENT ANNUAL SALARY <sup>1</sup>	TOTAL SALARIES
64	\$3.00	\$900	\$57,600	73	\$6.00	\$1,800	\$131,400
131	3.50	1,050	137,550	110	7.00	2,100	231,000
76	4.00	1,200	91,200	1	8.00	2,400	2,400
101	4.50	1,350	136,350	2	9.00	2,700	5,400
227	5.00	1,500	340,500				
31	5.50	1,650	51,150	1,073 <sup>2</sup>			\$1,757,915

<sup>1</sup> Counting 300 working days to the year.

<sup>2</sup> Engineers in the employ of the Public Service Commission, First District, omitted from this list. These have been listed under the New York City Service.

IN THE SERVICE OF NEW YORK STATE

TABLE XIII

APPOINTMENTS OF ENGINEERS, FROM COMPETITIVE ELIGIBLE  
LISTS, NEW YORK STATE, 1910-1915

TITLE	1910	1911	1912	1913	1914	1915	TOTAL
Architectural Designer					1		1
Architectural Draftsman					29		29
Architectural Draftsman and Designer	6	5	16	28			55
Assistant Civil Engineer	59	8	75	76	187		405
Assistant Electrical Engineer					1		1
Assistant Electrical Engineer, Dept. and Matts. Hospitals					14		14
Assistant Engineer, Storage and Drain- age Water Power						2	2
Axeman	137	56	90	28			311
Bridge Designer	23	3	4	23			53
Bridge Draftsman	18	1	9	41			69
Chainman	227	108	97	83		238	753
Chemical Engineer					1		1
Civil Engineering Draftsman	9	8	6				23
Civil Engineer and Expert in Building Construction					4		4
Electrical Engineer (Professional)	1	1		1			3
Engineering Draftsman		5	27	46	37	11	126
Heating Engineer				3			3
Junior Assistant						108	108
Junior Assistant, Grade 6						95	95
Junior Assistant Engineer					125		125
Junior Assistant Engineer, Departments						213	213
Junior Bridge Draftsman	38		28	125	107		298
Junior Draftsman	1					19	20
Junior Electrical Engineer					30		30
Junior Engineer, Grade 7					38		38
Junior Engineer, Grade 8					1		1
Junior Engineer, Grade 8 (Special)					20		20
Junior Railway Engineers					23		23
Leveler	38	9	68	114			229
Map Draftsman						5	5
Mechanical Engineer and Draftsman	7			1			8
Resident Engineer		3	10	1		8	22
Rodman	139	67	151	120			477
Sanitary Draftsman					1		1
Sanitary Engineers				1			1
Structural Designer					2		2
Structural Draftsman					36		36
Topographic Draftsman	4				2		6

TABLE XIV

QUALIFICATIONS FOR APPOINTMENT TO ENGINEERING POSITIONS IN NEW YORK STATE CIVIL SERVICE

TITLE OF POSITION	AGE AND PHYSICAL QUALIFICATIONS, RESIDENCE	EDUCATION, TRAINING AND EXPERIENCE	CONTENT OF EXAMINATION AND RELATIVE WEIGHTS	SALARY
Advisory Engineer, Department of State Fire Marshal	Unless otherwise stated, applicants for all positions in this table must be at least 21 years of age, citizens of the United States, and for at least three months residents of New York State.	Required, 3 years' experience as architect, engineer or superintendent engaged in building construction, or in manufacture or inspection of fire-lighting appliances and fire-escape appliances.	Questions relating to the duties of the position, 6. Experience, 4.	\$1,801-2,100
Chemical Engineer	Between 30 and 60.	Desired, completion of a course in chemical engineering and practical experience in determining the danger to life and health arising from chemical manufacturing process.		\$3,500
Civil Engineer, On Grade Crossings		Required, some knowledge of accounts and familiarity with track work, masonry construction, concrete, bridges, etc.	Written examination on points mentioned under experience, 1. Age, education, experience and personal qualifications, 1.	\$2,000-2,400
Civil Engineer, Assistant		Required, 3 years' practical experience in civil engineering or graduation in engineering and 2 years' experience.	Use of field instruments, survey methods and computations, structural mechanics and hydraulics, inspection of materials and work, and methods and practice in engineering construction, 10. Experience and personal qualifications, 7. Education, 3.	\$5-6 a day
Civil Engineer, Junior, Grade A		Required, 4 years' practical experience, graduation in engineering being counted as 2 years' experience.	Theoretical and practical questions on same subjects as in examination for assistant civil engineer, 5. Experience in personal qualifications, 3. Education, 2.	\$1,501-1,800

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Civil Engineer, Junior, Grade 7		Required, 2 years' practical experience, graduation in engineering being counted as 1 year's experience.	Theoretical and practical questions on same subjects as in examination for assistant civil engineer. 5. Experience in personal qualifications, 2. Education, 2.	\$1,201-1,500
Civil Engineering Department, Junior Assistant	Over 20. Open to non-residents.		Problems in applied mechanics and mathematics, including surveying, elementary structures, and hydraulics; questions on surveying and construction practice and on materials of construction, 3. Experience, education and personal qualifications, 2.	\$901-1,200
Civil Engineering Department, Junior Assistant	Over 18.	Required, some experience or training in engineering work.	Questions and problems in mensuration, simple land survey computations, use of field instruments and elementary engineering construction, 7. Education and experience, 3.	\$721-900
Ⓒ Civil Engineer and Expert in Building Construction		Required, 6 years' experience in civil engineering or building construction and familiarity with the type of building commonly erected for factory and mill purposes.		\$3,500
Division Engineer, Department of Highways		Required, 10 years' engineering experience with at least 5 years in responsible charge of field or office work, and actual experience in building highways.	Two papers on assigned subjects, 1. Age, experience, etc., 2. Oral examination, 1.	\$4,000
Electrical Engineer, Department of Architecture		Required, graduation in engineering and 3 years' experience or 5 years' experience without graduation.	Practical and technical questions on the preparation of plans and specifications for installing electrical wiring and fixtures, and central electrical generating plants and feeder systems, 5. Experience and education, 5.	\$1,800-2,100
Electrical Engineer, Department of State Fire Marshal		Required, 4 years' experience, graduation in electrical engineering counting as 2 years.	Questions relating to installation of electrical work of all kinds in building, 7. Experience, 3.	\$2,101-2,400

TABLE XIV—Continued

TITLE OF POSITION	AGE AND PHYSICAL QUALIFICATIONS, RESIDENCE	EDUCATION, TRAINING AND EXPERIENCE	CONTENT OF EXAMINATION AND RELATIVE WEIGHTS	SALARY
Electrical Engineer, Assistant, Public Service Commission		Required, 7 years' experience in electric railroad work preferably with rapid transit or heavy electric traction line, graduation in engineering equivalent to 4 years' experience.	Written examination on theoretical computations on design of electric railroad equipment, and design, selection, installation and inspection of electric railroad motors, signals, switching apparatus, etc., 2. Experience, training, and personal qualifications, 3.	\$1,800-2,100
Electrical Engineer, Assistant, State Hospitals, Departments, Etc.		Required, graduation in mechanical or electrical engineering, and 1 year's practical experience or without graduation, 2 years' experience as engineer or electrician, including 1 year in charge of steam engine or electrical machinery.	Practical and technical questions on electricity, electrical machinery and apparatus, steam engines, etc., 6. Experience and education, 4.	\$601-900 and maintenance; or to those passing with a lower grade \$600 and maintenance, or less.
66 Electrical Engineer, Junior, Public Service Commission	Open to non-residents.	Required, 3 years' training in technical school and 1 year's experience in electric railroad or electric lighting work in manufacturing or installing electrical or mechanical apparatus.	Theoretical and practical questions relating to the construction and operation of power house and railway equipment, electric distribution, measurements, standards, etc., 5. Experience, personal qualifications, 3. Education, 2.	\$901-1,200
Heating Engineer, Department of Architecture		Required, 5 years' experience in detailing, design or installation of mechanical equipment of buildings, power stations, etc., credit given for technical education to an extent not to exceed 2 years' experience.	Written examination on design and installation of different forms of heating and ventilating systems, including power equipment, conduits, air-conditioning apparatus, etc., and general knowledge of building construction and mechanical equipment, with codes and rules governing them, 6. Experience, etc., 4.	\$1,500-3,500
Mechanical Engineer, Transportation Department, Public Service Commission	Open to men only, and also open to non-residents.	Required, 5 years' practical experience as mechanical engineer with complete knowledge of street railway equipment and power station plant in detail, including their operation, also experience in operation of steam locomotives, and knowledge of fuel combustion, smoke prevention, and use of air brakes desired.	Candidates rated on education, general and special training, experience and personal qualifications.	\$3,401-3,000

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Railway Engineer, Junior, Public Service Commission	Open to non-residents.	Required, 3 years' training in technical school and 1 year's experience in electric railroad, or electric lighting work, or in the manufacturing or installation of electrical or mechanical apparatus.	Theoretical and practical questions relating to the construction and operation of power house and railway equipment, measurements, standards, etc. 5. Experience and personal qualifications, 3. Education, 2.	\$901-1,200
Resident Engineer, Public Service Commission	Must be physically qualified to withstand work under air pressure of 25 lbs. Non-residents admitted.	Required, 10 years' engineering experience, including 2 years' practicing foundation or tunneling under compressed air. Must have demonstrated ability to hold responsible positions. Graduation in engineering counts as 2 years' experience.	Training and experience, 1. Oral examination, 1.	\$3,001-4,200
Resident Engineer, Department of State Engineer		Required, 5 years' experience in civil engineering work, 3 years of this in responsible charge of work.	Experience, education and personal qualifications, 5. Two theses, a report upon some work of importance carried out under charge of the candidate, and a discussion of some assigned copy, 6.	\$2,400-3,000
Sanitary Engineer, Department of Architecture		Required, 4 years' experience in sanitary engineering; credit given for technical education to an extent not exceeding 1 year's experience.	Written examination on design and supervision of the construction of sewage disposal, water supply, including filtration, house draining, and hot-water heating systems, 2. Experience, education, etc., 2.	\$2,000-2,500
Sanitary Engineer, Assistant, State Department of Health	Open to non-residents.	Required, graduation from technical school and 3 years' experience in sanitary engineering; credit given for technical education to an extent not exceeding 1 year's experience.	Written examination on design, construction and supervision of sewage disposal work and water work, on the principles of design and testing plumbing, on methods of refuse disposal, of the principles governing stream pollution and its prevention, 6. Experience, education, etc., 4.	\$2,000
Structural Engineer, Office of State Architect			Theoretical and practical questions on strength of materials, including timber, masonry of all kinds, steel and reinforced concrete, also design and construction of floors, girders, columns, walls, arches, piers, foundations, roof trusses, retaining walls and dams; calculation of quantities and topographical surveying, 6. Experience and education, 4.	\$1,500-1,800
Asstman	Minimum age, 16.	Required, knowledge of arithmetic, elementary mensuration and beginners' work in engineering office or field work.	Mathematics, 5. Duties of position, 4. Education and experience, 1.	\$2-2.50 a day

TABLE XIV—Continued

TITLE OF POSITION	AGE AND PHYSICAL QUALIFICATIONS, RESIDENCE	EDUCATION, TRAINING AND EXPERIENCE	CONTENT OF EXAMINATION AND RELATIVE WEIGHTS	SALARY
Chairman	Minimum age, 18.		Questions covering arithmetic, mensuration, and use of minor surveying instruments, 8. Education and experience, 2.	\$2.50-3 a day
Chief of Construction, Chief of Maintenance, Department of Highways		Required, 10 years' experience in highway construction.	Written examination on subjects relating to duties of position and on matters of general construction knowledge, 1. Age, experience, etc., 2. Oral examination, 1.	\$4,000
Designer, Bridge	Open to non-residents.	Required, 8 years' experience in drafting, designing and construction, structural steel and bridge work. Graduation in civil engineering equivalent to 1 year's experience.	Questions on graphical and analytical determination of stresses, and the design of trusses and girders, foundations, bearings, etc., 6. Experience, education, and personal qualifications, 4.	\$1,501-2,100
Designer, Structural	Open to non-residents.	Required, 6 years' experience in steel or reinforced concrete structures, including not less than 1 year's practice as designer; graduation in engineering equivalent to 2 years' experience.	Written examination on the graphical and analytical determination of stresses and the design and erection of arches, trusses and girders, foundations, bearings, etc., 6. Experience, education, and personal qualifications, 4.	\$1,801-2,100
Examiner of Plans and Specifications, Department of State Fire Marshal		Required, knowledge of the design, manufacture or installation of standpipes, sprinkler system, and fire escapes.	Questions relating to duties of position, 6. Experience, 4.	\$2,101-2,400
Expert in Fire Prevention	Between 30 and 60.	Required, 10 years' experience in solving problems involved in direct and abutting fire hazards, the means and adequacy of exits from buildings, the interior arrangement and equipment of factories from the standpoint of safety in case of fire or panic, and in the design, arrangement, installation and use of appliances for fire prevention.	Candidates rated on education, special training, and experience.	\$3,500

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Foreman of Public Works		Required, thorough practical experience as foreman or in charge of men upon public works or engineering construction.	Practical questions, 5. Experience, 5.	\$8.50-5 a day
Superintendent of Construction, Department of Architecture		Required, 5 years' practical experience in building construction, either as superintendent of construction, contractor, architect or engineer.	Materials and building construction, including plumbing, heating, and electric work, and all material employed in first-class buildings and details of construction, business communications with reference to work under construction, and details of complete specifications for various work, 6. Training and experience, 4.	\$1,800
Superintendent of Construction, Superintendent of Maintenance, State Department of Highways		Required, 5 years' practical experience in road building, or in construction or maintenance work on public or private enterprises.	Written examination on subjects relating to duties of position, 1. Age, experience, etc., 2. Oral examination, 1.	\$2,500-3,000
Superintendent of Highways, County	Must be resident of county in which application is made for appointment.	Required, thorough practical experience in actual construction and maintenance of highways, and familiarity with highways of the county and their needs, and with the best means and materials available for improvement of highways in the county.	Written examination on duties of position under highway law and on methods and actual operation of improving and maintaining highways in the county. 50. Experience and personal qualifications, 50.	\$650-2,500
Rodman	Minimum age, 20.		Theoretical and practical questions, including problems in mensuration, field and office practice in surveying, elementary mechanics and hydraulic and engineering construction, 6. Experience and personal qualifications, 1. Education, 3.	\$3.50-4 a day
Leveler		Required, 2 years' experience in civil engineering, or graduation in civil engineering and 1 year's experience.	Theoretical and practical questions, including use of field instruments, survey methods and computations, structural mechanics and hydraulics, inspection of materials and work, and methods and practice in engineering construction, 5. Experience and personal qualifications, 3. Education, 2.	\$4.50-5 a day

TABLE XIV—Continued

TITLE OF POSITION	AGE AND PHYSICAL QUALIFICATIONS, RESIDENCE	EDUCATION, TRAINING AND EXPERIENCE	CONTENT OF EXAMINATION AND RELATIVE WEIGHTS	SALARY
Inspector, Assistant, Electric Railroad, Public Service Commission		Required, ability to pass judgment on the construction, equipment and operation of electric roads, including the examination of tracks and road beds, structures on electric railroads, cars and equipment, investigation in methods of operation, and sufficiency of service, sufficiency and reliability of power supply and complaints and accidents.	Rated solely on experience and training.	\$1,500
46 Inspector of Construction, State Department of Highways	Must be in good physical condition, able-bodied, fit for outdoor duties involving exposure. Must be resident of county in which the highway is located.	Must have had practical experience in building roads or other private and public works, either in construction or maintenance.	Practical questions on the constructions of roads under the various methods employed, including the preparation and placing of concrete, inspection of materials and work, 1. Experience and personal qualifications, 1.	\$3.50-4.50 a day
Inspector, Chief Boiler, Department of State Fire Marshal			Written examination pertaining to boiler inspection and duties of the position, which are, to have supervision of the general boiler inspectors and to adjudicate differences between owners and state inspectors, 6. Experience, 4.	\$1,801-2,100
Inspector, Engine and Boilers, Department of Public Works		Required, experience in the construction and use of marine boilers and engines of all kinds and their appurtenances and parts, also must be well qualified by technical education and training.	Questions relating to duties of position, 2. Education and experience, 3.	\$3,000

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Engineering Inspector, Department of Architecture		Required, technical knowledge of high and low pressure steam and hot water heating system, plumbing, electric wiring and switchboard work, house sewage disposal, refrigerator, laundry, and electrical and steam power equipment, materials of construction, testing and testing instruments, machinery foundations, architectural plans and specifications, also practical experience in the installation of machinery, familiarity with various makes of machinery and general knowledge of the Underwriters' rules. Course in mechanical or electrical engineering desired.	Practical questions, 6. Experience and education, 4.	\$2,250
Inspector of Gas, Assistant, Public Service Commission	Open to non-residents.	Required, graduation in chemistry or equivalent education.	General and theoretical chemistry, quantity of analysis, photometry, calorimetry, and manufacture of gas, 7. Education, experience and special training, 3.	\$1,080-1,200
Inspector of Gas, Chief, Public Service Commission	Open to non-residents.	Required, graduation from school of technology, and 2 years' experience in work related to gas, chemistry, testing, manufacturing details, distribution problems.	Gas, including manufacture, distribution, methods of testing chemical composition, candle power, and calorific value, methods of testing gas meters, etc., 1. Age, education, experience and special training, 1.	\$2,500
Inspector of Locomotive Boilers, Public Service Commission		Applicant must have been either foreman boiler-maker in charge of general railway repair shops, or general or division boiler inspector on a steam railroad or a graduate engineer with 2 years' experience in locomotive boiler inspection designed or manufactured.	Written examination pertaining to duties of the position, which include inspections and reports of locomotive boiler accidents and review of boiler designs, specifications, reports of inspections, repairs, etc., required of steam railways, 1. Experience, education and personal qualifications, 1.	\$3,000
Inspector of Masonry		Required, 2 years' practical experience as engineer foreman, or inspector on public works or other engineering construction, or 5 years' experience as mason.	Practical questions on materials, construction and inspection of concrete, stone and brick masonry, including preparation of forms and foundations, computation of quantity, etc., 4. Experience, education and personal qualifications, 6.	\$3.50-5 a day

TABLE XIV—*Concluded*

TITLE OF POSITION	AGE AND PHYSICAL QUALIFICATIONS, RESIDENCE	EDUCATION, TRAINING AND EXPERIENCE	CONTENT OF EXAMINATION AND RELATIVE WEIGHTS	SALARY
Inspector of Mines	Physical examination required.	Special weight given to experience in mine or other employment, especially related to the duties of the position, and to ability to speak languages other than English.	Arithmetic (fundamental rules, fractions, decimals and measures), 1. Questions on laws relating to the department, 2. Questions on the nature and methods of mine inspection, preparation of reports, etc., 5. Age, experience and education, 2.	\$1,200
Sanitary Inspector		Required, general knowledge of sanitary science, engineering, chemistry, and bacteriology, the provisions of the public health law and general sanitary work.	Technical and practical questions on the subjects of which knowledge is required, 7. Education, experience and personal qualifications, 3.	\$3 to 5 a day
Sanitary Engineering Inspector, State Department of Health		Required, 2 years' experience in sanitary engineering; graduation from engineering school equivalent to 1 year's experience.	Theoretical and practical questions on hydraulic, water supply problems, construction and management of water works, filtration plants, sewage disposal and health sanitation, 5. Experience, 3. Education, 2.	\$1,200-1,500
Inspector of Special Track Work Installation, Public Service Commission	Open to non-residents.	Required, 5 years' experience as foreman, supervisor, or otherwise in responsible charge of the installation and construction of special track work on steam railroad terminals or high speed electric lines.	Written examination, 1. Oral examination, 1. Experience and training, 2.	\$1,501-1,800
Inspector of Steam Boilers, State Fire Marshal			Practical questions on methods of testing and construction of boilers and the duties of the position which are to inspect and test boilers in various parts of the state, 6. Experience, education and special training, 4.	\$1,200

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Inspector of Steel	Open to non-residents.	Required, thorough knowledge of steel mill and shop practice, and 2 years' experience as foreman or inspector in steel mill, bridges or structural steel shop, iron and steel foundry, or in structural steel erection.	Oral examination and matters pertaining to the duties of position, 4. Letter-writing or report-writing, 1. Experience and training, 5.	\$1,500
Inspector of Tunnels	Must have physical ability to work under heavy artificial air pressure.	Required, extensive experience in modern tunnel work and ability to perform all the duties relative to tunnels and the safety and health of employes therein imposed on the commissioner of labor by Article IX of the Labor Law as amended by Chapter 399, Laws of 1907. Some clerical ability required.	Tunnel construction with special reference to the safety and health of employes, 5. Experience, education and personal qualifications, 5.	\$1,600

**TABLE XV**  
**QUALIFICATIONS REQUIRED FOR APPOINTMENT TO DRAFTSMAN POSITIONS, NEW YORK STATE CIVIL SERVICE**

TITLE OF POSITION	AGE, SEX, PHYSICAL QUALIFICATIONS AND RESIDENCE	EDUCATION, TRAINING AND EXPERIENCE	CONTENT OF EXAMINATION AND RELATIVE WEIGHTS	SALARY
Architectural Designer		Required, 6 years' technical training and experience of which 3 years was in an architect's office as architectural draftsman or designer.	Design (making a complete design of the whole or assigned parts of a building to meet a given problem), 6. Experience, education and special training, 4.	\$1,500-2,500
Architectural Draftsman		Required, 2 years' practical experience, 1 year's experience credited to graduates in civil engineering or architecture.	Theoretical and practical questions and drafting, 7. Experience and education, 3.	\$1,000-1,500
Architectural Draftsman, Junior	Minimum age, 18.		Elementary, geometrical constructions, inking in drawings, making tracings and copies of drawings to scale, and questions pertaining to the duties of the position.	\$500-1,000
Bridge Draftsman	Non-residents admitted.	Required, 2 years' experience in drafting, 1 year of this on structural steel; graduation in civil engineering counted as 1 year's experience.	Questions on computation of girders and simple trusses and design of joints and detailing, and detailing bridge members, 7. Experience, education, and personal qualifications, 3.	\$1,201-1,500
Bridge Draftsman, Junior	Minimum age, 20. Open to non-residents.	Must have had some experience in mechanical or structural drafting.	Questions on drafting-room practice, including calculation of weight, quantity, and bevels, simple girders, joints, etc., and detailing and tracing bridge members, 8. Experience and education, 2.	\$901-1,200
Electrical Draftsman, Dept. of Architecture		Required, 3 years' experience in electrical and mechanical drafting, credit given for technical education to an extent not exceeding 1 year's practice.	Written examination requiring ability to detail power plant, switchboard, and wiring from general data, 3. Experience, education, etc., 2.	\$1,501-1,800

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Engineering Draftsman		Required, 2 years' experience in drafting or engineering, 1 year's experience credited for graduation in engineering.	Questions covering design and erection of engineering structures and drafting, 6. Education and experience, 4.	\$4-5 a day
Junior Draftsman	Minimum age, 20.	Required, some experience in mechanical or structural drafting.	Problems in applied mathematics and mechanics, including calculations of simple girders, joints, etc., questions on drafting-room practice, and detailing and tracing bridge members, 8. Experience and education, 2.	\$901-1,200
Sanitary Draftsman		Required, 2 years' experience in drafting rooms, 1 year of this on sanitary work; credit given for technical education; graduation counting as 1 year's experience.	Written examination, including drafting, ability to read architectural plans and to produce rapidly detailed drawing of the plumbing and sanitary equipment of large buildings and institutions, 2. Experience and training, 1.	\$1,200-1800
Special Track Work Draftsman, Public Service Commission	Open to non-residents.	Required, 5 years' experience in drafting or designing special track work, preference given to those who have had experience in steam railroad, special work manufacture, or in the track department of a steam railroad; graduation in engineering equivalent to 1 year's experience.	Practical questions on the detailing of frogs and switches, and subway track work, problems in simple, compound and parabolic curves, 6. Education and experience, 4.	\$1,501-1,800
Structural Draftsman	Non-residents admitted.	Required, 2 years' experience, including 1 year in structural drafting; graduation in engineering counts as 1 year's experience.	Computations of stresses in and detailing of steel and concrete structures, problems in applied mathematics, and questions on materials and methods of construction, 7. Experience, education, and personal qualifications, 8.	\$1,201-1,500
Architectural Designer		Required, 6 years' technical training and experience of which 2 years was in an architect's office as architectural draftsman or designer.	Design (making a complete design of the whole or assigned parts of a building to meet a given problem), 6. Experience, education, and special training, 4.	\$1,500-2,500
Architectural Draftsman		Required, 2 years' practical experience, 1 year's experience credited to graduates civil engineering or architecture.	Theoretical and practical questions and drafting, 7. Experience and education, 8.	\$1,000-1,500

IN THE SERVICE OF NEW YORK STATE

TABLE XV—*Concluded*

TITLE OF POSITION	AGE, SEX, PHYSICAL QUALIFICATIONS AND RESIDENCE	EDUCATION, TRAINING AND EXPERIENCE	CONTENT OF EXAMINATION AND RELATIVE WEIGHTS	SALARY
Architectural Draftsman, Junior	Minimum age, 18.		Elementary, geometrical constructions, inking in drawings, making tracings and copies of drawings to scale, and questions pertaining to the duties of the position.	\$500-1,000
Bridge Draftsman	Non-residents admitted.	Required, 2 years' experience in drafting, 1 year of this on structural steel; graduation in civil engineering counted as 1 year's experience.	Questions on computation of girders and simple trusses and design of joints and detailing, and detailing bridge members, 7. Experience, education, and personal qualifications, 3.	\$1,201-1,500
100 Bridge Draftsman, Junior	Minimum age, 20. Open to non-residents.	Must have had some experience in mechanical or structural drafting.	Questions on drafting-room practice, including calculation of weight, quantity, and bevels, simple girders, joints, etc., and detailing and tracing bridge members, 8. Experience and education, 2.	\$901-1,200
Electrical Draftsman, Dept. of Architecture		Required, 3 years' experience in electrical and mechanical drafting, credit given for technical education to an extent not exceeding 1 year's practice.	Written examination requiring ability to detail power plant, switchboard, and wiring from general data, 3. Experience, education, etc., 2.	\$1,501-1,800
Engineering Draftsman		Required, 2 years' experience in drafting or engineering, 1 year's experience credited for graduation in engineering.	Questions covering design and erection of engineering structures and drafting, 6. Education and experience, 4.	\$4-5 a day
Junior Draftsman	Minimum age, 20.	Required, some experience in mechanical or structural draftsman.	Problems in applied mathematics and mechanics, including calculations of simple girders, joints, etc., questions on drafting-room practice, and detailing and tracing bridge members, 8. Expe-	\$901-1,200

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Sanitary Draftsman		Required, 2 years' experience in drafting rooms, 1 year of this on sanitary work; credit given for technical education; graduation counting as 1 year's experience.	Written examination, including drafting, ability to read architectural plans and to produce rapidly detailed drawing of the plumbing and sanitary equipment of large buildings and institutions, 2. Experience and training, 1.	\$1,200-1,800
Special Track Work Draftsman, Public Service Commission	Open to non-residents.	Required, 5 years' experience in drafting or designing special track work, preference given to those who have had experience in steam railroad, special work manufacture, or in the track department of a steam railroad; graduation in engineering equivalent to 1 year's experience.	Practical questions on the detailing of frogs and switches, and subway track work, problems in simple, compound and parabolic curves, 6. Education and experience, 4.	\$1,501-1,800
Structural Draftsman	Non-residents admitted.	Required, 3 years' experience, including 1 year in structural drafting; graduation in engineering counts as 1 year's experience.	Computations of stresses in and detailing of steel and concrete structures, problems in applied mathematics, and questions on materials and methods of construction, 7. Experience, education and personal qualifications, 3.	\$1,201-1,500

## CHAPTER IV

### THE ENGINEER IN THE SERVICE OF NEW YORK CITY

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The statements which were made with regard to the federal engineering service and the New York State engineering service, apply also to the engineering service of New York City, viz., an employe's title is not always a guarantee of the nature of his service and technical engineers only are considered in what follows.

We have included the Public Service Commission of the 1st District, as a part of the service of the City of New York for the reasons stated in the preceding chapter.

To form a picture of the engineering service of the government of New York City, the following tables were prepared:

TABLE XVI shows the number of engineering positions under each title in each department of New York City and the total number for each title and for each department. By reading from left to right, the total number for each title is obtained. By reading from top to bottom, the total number for each department.

There are 57 distinct titles in the list.

TABLE XVII gives the titles, numbers and individual salaries for the whole service.

TABLE XVIII contains a summary giving the number of engineering positions in each department.

TABLE XIX gives the number of engineers at each rate of pay and the total salaries at each rate. This table shows that New York City (including the Public Service Commission, 1st District) is paying \$5,139,466.09 per annum in salaries for its engineering service. Summarizing the data given in this table and rearranging in terms of salary, number and percentages, we obtain the following:

IN THE SERVICE OF NEW YORK CITY

SALARY	NUMBER	PER CENT
\$900-\$1,000	714	22.5
1,001- 1,500	1060	33.4
1,501- 2,000	814	25.7
2,001- 2,500	310	9.8
2,501- 3,000	110	3.5
3,001- 3,500	41	1.3
3,501- 4,000	53	1.6
4,001- 4,500	16	.5
4,501- 5,000	14	.4
5,001- 5,500	3	.1
5,501- 6,000	3	.1
6,001- 6,500	6	.2
6,501- 7,000	10	.3
7,001- 7,500	10	.3
7,501-20,000	8	.3
Total	3,172	100.0

It will be seen that 68.9 per cent of these salaries lie in the region between \$1,000 and \$2,500. If we adopt \$3,000 or over per annum as a fair measure of the "successful" engineer, we find the following:

SALARY	NUMBER	PER CENT
Below \$3,000	2,953	93.1
\$3,000 or over	219	6.9
Total	3,172	100.0

Following the same procedure as in Chapters II and III, we next present TABLE XX which shows the number of appointments to positions of an engineering nature for the years 1908-1915.

TABLE XXI contains a summary of recent engineering examinations giving the title, qualifications, relative weights, content of examinations and weights of subjects, and salaries.

*Sources of Information*

The information contained in the foregoing tables was obtained from the following sources:

TABLES XVI, XVII, XVIII and XIX were compiled from the Civil List of New York City for the period January 1, 1916, to June 30, 1916.

TABLE XX was compiled from the Annual Reports of the Municipal Civil Service Commission for the years 1908-1915.

TABLE XXI was compiled from recent examination announcements of the Municipal Civil Service Commission, City of New York.

*Advancements and Promotions, New York City*

This civil service classification affects only titles, promotions, transfers, layoffs and other phases of strictly civil service control. Initial salaries, increases in salary, and the appraisal of positions on the basis of duties, are made by the Board of Estimate and Apportionment upon recommendation by the Bureau of Standards. The recommendations of the Bureau of Standards are made in accordance with the standard specifications for personal service which appear in Chapter V.

Although these specifications have not been formally adopted by the Board of Estimate and Apportionment, the rates recommended have been applied in practically all cases in fixing rates, and making increases, the annual tax budget, in filling or refusing to fill current vacancies and in passing upon transfers from one code to another. The recommendations in the standard specifications have been approved by the Civil Service Commission, which is about to adopt a new Classification based upon these specifications. In the meantime the conflict between the existing obsolete civil service classification and the standard specifications which are being applied by the Board of Estimate and Apportionment has led to much confusion and difficulty for both executives and employees.

The positions in the service in New York City are graded by the civil service commission according to the amount of the annual compensation, or its equivalent, attaching to each, as follows:<sup>1</sup>

Grade A	—	\$300	annually
" B	—	600	"
" C	—	1,200	"
" D	—	1,800	"
" E	—	2,400	" , or over

<sup>1</sup> Rules and classification, Municipal Civil Service Commission of the City of New York, 1914, p. 56.

Promotions are obtained by examinations, as follows:

"Promotion examinations<sup>1</sup> shall be open to all persons who shall have served with fidelity for not less than six months in positions in the same class in the grade next lower in the same department, office or institution. For increase of salary in the same position beyond the grades fixed by these rules, examinations shall be open to all persons who shall have served with fidelity for not less than six months in the grade next lower."

The actual manner in which a promotion examination works out (the dynamics, so to speak) is as follows:

- (1) The head of a department makes a request for an examination.
- (2) A field investigation of the duties called for is made by the examining staff of the civil service commission.
- (3) The chief examiner makes a report to the commission on the scope of the examination and the eligibility of candidates.
- (4) The commission then orders the examination.
- (5) Thereupon applications are filed by the candidates along with efficiency records endorsed by the department.
- (6) These applications are investigated to determine eligibility and check the records.
- (7) The examination is held. Sometimes there is a medical examination and sometimes a practical examination in addition to the written examination.
- (8) The candidates are rated.
- (9) Based on this rating an eligible list is compiled.
- (10) The eligible list is certified and promulgated by the commission.
- (11) Promotions are made from the list.<sup>2</sup>

The general discussion of the data presented in this chapter is contained in Chapter VI.

<sup>1</sup> Rules and Classification, p. 28.

<sup>2</sup> Dr. Henry Moskowitz and the members of the staff of the Municipal Civil Service Commission very kindly provided the information regarding the New York City service.

TABLE XVI

: ENGINEERS IN THE SERVICE OF NEW YORK CITY—JUNE 30, 1916

	DEPT. OF FINANCE	DEPT. OF STREET CLEANING	DEPT. OF TAXES AND ASSESSMENT	BOARD OF ASSESSORS	DEPT. OF EDUCATION	DEPT. OF DOCKS AND FERRIES	DEPT. OF PLANT AND STRUCTURES	DEPT. OF PARKS	B'D OF ESTIMATE AND APPOINTMENT	B'D OF WATER SUPPLY	B'D OF MAINTENANCE	PREM. BOR. OF THE BRONX	PREM. BOR. OF BROOKLYN	PREM. BOR. OF QUEENS	PREM. BOR. OF RICHMOND	COMMISSIONER OF ACCOUNTS	FUR. SER. COM. 1st DISTRICT	DEPT. OF HEALTH	DEPT. OF CORRECTION	DEPT. OF WATER SUPPLY, GAS AND ELECTRICITY	NEW DEPARTMENT	RELEVUE AND ALLIED HOSPITALS	POLICE DEPARTMENT	DEPT. OF PUBLIC CHARITIES	TOTALS
901 Architectural Designer	..	..	..	..	52	1	..	2	1	4	1	..	1	..	..	..	..	..	..	..	..	..	..	..	123
Architectural Draftsman	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	245
Asst. Designing Engineer	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	24
Asst. Division Engineer	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	160
Asst. Electrical Engineer	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	50
Asst. Engineer	16	1	..	..	..	24	24	6	25	110	41	42	61	45	10	..	..	..	..	36	6	..	1	..	500
Asst. Engineer, Designer	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	10
Asst. Mechanical Engineer	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	6
Asst. Surveyor	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Associate Efficiency Engineer	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Assman	..	..	..	..	..	..	..	5	..	..	30	7	18	31	8	..	..	..	..	..	..	..	..	..	86
Chairman	..	..	..	..	..	15	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1
Chairman and Rodman	..	..	..	..	..	1	..	..	..	..	..	1	1	3	..	..	..	..	..	..	..	..	..	..	22
Chief Engineer	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	150
Chief Gas Engineer	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1
Computers	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1
Consulting Engineer	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	6
Department Engineer	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	9
Deputy Chief Engineer	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1
Deputy Engineer	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1
Designer	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1
Designing Engineer	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1
Division Engineer	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	27
Draftsman	..	1	21	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	12
Draftsman's Helper	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	333
Efficiency Engineer	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2

THE ENGINEERS IN PUBLIC SERVICE



THE ENGINEER IN PUBLIC SERVICE

TABLE XVII  
ENGINEERS IN THE EMPLOY OF THE CITY OF NEW YORK,  
JUNE 30, 1916

DEPARTMENT	TITLE	NUMBER	SALARIES
<i>Department of Finance</i> Engineering Division	Chief Engineer	1	1 @ \$4,000
	Assistant Engineers	15	1 @ 1,650
		4 @ 1,900	
		1 @ 1,920	
		1 @ 2,250	
		2 @ 2,240	
		2 @ 2,400	
1 @ 2,450			
			1 @ 2,700
			1 @ 3,000
<i>Department of Street Clean- ing</i> Borough of Manhattan	Assistant Engineer	1	1 @ 2,100
	Examining Engineer	1	1 @ 3,500
	Transitman and Computer	1	1 @ 1,900
	Draftsman	1	1 @ 1,000
<i>Department of Taxes and Assessments</i> Block Tax Assessment Maps	Assistant Surveyors	2	1 @ 2,500
			10 @ 3,500
	Draftsmen	21	10 @ 1,350
			2 @ 1,600
			6 @ 1,900
		3 @ 2,100	
<i>Board of Assessors</i>	Topographical Draftsman	1	1 @ 1,800
<i>Department of Education</i> Bureau of Supplies Bureau of Buildings	Fuel Engineer	1	1 @ 3,000
	Architectural Draftsman	40	1 @ 1,570
		27 @ 1,831.67	
		1 @ 1,962.50	
		5 @ 2,093.23	
		4 @ 2,355	
		2 @ 2,616.67	
Junior Architectural Draftsman		2	1 @ 900
		1 @ 915.83	
Structural Steel Draftsman		5	1 @ 2,355
		4 @ 1,831.67	
Junior Draftsman		3	2 @ 915.83
Mechanical Draftsman		5	1 @ 1,308.23
		1 @ 1,429.17	
		1 @ 1,570	
	1 @ 2,224.17		
	1 @ 2,355		
Borough of Brooklyn	Architectural Draftsman	10	10 @ 1,831.67
Borough of Queens	Junior Architectural Draftsman	3	2 @ 900
	Architectural Draftsman	2	1 @ 1,831.67
		1 @ 2,224.17	
Borough of Richmond	Junior Architectural Draftsman	1	1 @ 915.83
Division of Reference and Research	Junior Architectural Draftsman	1	1 @ 1,046.67
<i>Department of Docks and Ferries</i> General Administration Bureau of Engineering	Assistant Engineer	1	1 @ 2,100
	Chief Engineer	1	1 @ 4,000
	Assistant Engineer	21	1 @ 1,500
			2 @ 1,900
			6 @ 2,100
			5 @ 2,400
			2 @ 2,700
			2 @ 4,000
			1 @ 4,660
	Draftsman	1	1 @ 2,100
	Architectural Draftsman	1	1 @ 1,600
	Topographical Draftsman	6	1 @ 1,900
		1 @ 1,900	
	Chainmen and Rodmen	12	12 @ 1,000
Hydrographers	2	2 @ 1,800	
Levelers	3	3 @ 1,350	



IN THE SERVICE OF NEW YORK CITY

TABLE XVII—Continued

DEPARTMENT	TITLE	NUMBER	SALARIES
<i>Department of Docks and Ferries—Cont.</i>			
Bureau of Engineering	Transitmen and Computers	4	1 @ \$1,500 3 @ 1,800
Bureau of Ferries	Mechanical Engineer	1	1 @ 3,420
Bureau of Mechanical Engineering	Assistant Engineer	1	1 @ 2,100
Bureau of Supplies	Mechanical Engineer	1	1 @ 2,400
<i>Department of Plant and Structures</i>	Assistant Engineer	1	1 @ 1,800
Engineering Staff	Assistant Engineer	24	1 @ 1,260 1 @ 1,800 2 @ 2,100 1 @ 2,250 2 @ 2,280 1 @ 2,400 1 @ 2,500 1 @ 2,580 1 @ 2,700 1 @ 2,850 1 @ 3,000 1 @ 3,180 1 @ 3,600 2 @ 4,000 2 @ 4,560 2 @ 5,000 1 @ 7,200
	Transitmen	3	1 @ 1,620 2 @ 1,800
	Leveler	1	1 @ 3,350
	Structural Steel Draftsman	8	1 @ 1,500 7 @ 1,800
	Rodmen	3	3 @ 1,140
<i>Department of Parks</i>			
Manhattan and Richmond	Chief Engineer	1	1 @ 5,000
	Principal Assistant Engineer	1	1 @ 2,460
	Assistant Engineer	2	2 @ 2,550
	Transitman	1	1 @ 1,800
	Topographical Draftsman	2	1 @ 1,650 1 @ 2,100
	Architectural Draftsman	2	2 @ 1,500
	Rodmen	3	2 @ 1,050 1 @ 1,200
	Axemen	2	2 @ 1,050
Borough of The Bronx	Assistant Engineer	1	1 @ 2,100
Brooklyn—Administration	Horticultural Draftsman	1	1 @ 1,950
	Assistant Engineer	2	1 @ 2,280 1 @ 3,060
	Topographical Draftsman	1	1 @ 1,800
	Transitman	1	1 @ 1,650
	Rodmen	2	2 @ 1,300
	Axemen	3	3 @ 900
Borough of Queens—Administration	Assistant Engineer	1	1 @ 2,100
	Draftsman	1	1 @ 1,800
	Transitman	1	1 @ 1,500
	Rodman	1	1 @ 1,300
<i>Board of Estimate and Apportionment</i>			
Bureau of Public Improvement	Chief Engineer	1	1 @ 12,000
	Deputy Chief Engineer	1	1 @ 7,500
	Assistant Engineer	8	1 @ 2,280 2 @ 2,400 2 @ 2,700 1 @ 3,300 1 @ 3,500 1 @ 4,000 2 @ 1,500 3 @ 1,650 1 @ 2,000
	Topographical Draftsman		

THE ENGINEER IN PUBLIC SERVICE

TABLE XVII—Continued

DEPARTMENT	TITLE	NUMBER	SALARIES
<i>Board of Estimates and Apportionment—Cont.</i>	Engineer—Chief of Bureau	1	1 @ \$7,500
	Assistant Engineers	4	1 @ 2,400 2 @ 3,000 1 @ 4,300
Bureau of Franchises	Topographical Draftsman	1	1 @ 1,650
	Assistant Engineers	3	1 @ 1,800 2 @ 2,700
	Architectural Draftsman	1	1 @ 1,200
	Mechanical Draftsman	1	1 @ 1,200
Bureau of Contract Supervision	Assistant Engineer (Consultant)	1	1 @ 5,000
	Assistant Engineers	13	1 @ 2,000 2 @ 2,250 2 @ 2,400 2 @ 3,000 2 @ 4,500 1 @ 5,000
Bureau of Contract Supervision—Central Testing Laboratory	Draftsman	1	1 @ 1,650
	Mechanical Engineer	1	1 @ 2,400
Bureau of Contract Supervision—Division of Supplies	Assistant Engineers	2	1 @ 2,700 1 @ 2,550
	Assistant Engineers	2	1 @ 1,900 1 @ 2,100
Committee on the City Plan	Draftsman (Mechanical)	1	1 @ 1,250
	Topographical Draftsman	2	2 @ 1,200
Committee on Pensions	Draftsman	2	2 @ 2,500
	Assistant Engineers	2	1 @ 2,400 1 @ 3,000
<i>Board of Water Supply Engineering—Headquarters</i>	Chief Engineer	1	1 @ 16,000
	Deputy Chief Engineer	1	1 @ 9,000
	Consulting Engineers	3	2 @ 3,000 1 @ 3,600
	Department Engineer	1	1 @ 7,500
	Division Engineer	1	1 @ 4,000
	Designing Engineers	2	1 @ 5,500 1 @ 6,500
	Mechanical Engineer	1	1 @ 4,000
	Assistant Engineers	27	2 @ 1,750 5 @ 1,800 5 @ 2,000 7 @ 2,100 2 @ 2,250 2 @ 2,350 2 @ 2,350 2 @ 2,700 2 @ 3,000 2 @ 3,300 2 @ 3,600 1 @ 4,000 1 @ 4,700
	Assistant Engineer Charge of Section	1	1 @ 3,600
	Electrical Engineer	1	1 @ 2,400
	Assistant Mechanical Engineer	1	1 @ 2,100
	Assistant Engineer Designer	6	1 @ 2,200 2 @ 2,350 1 @ 3,000 4 @ 1,750
	Topographical Draftsman	12	1 @ 1,750 5 @ 1,800 1 @ 2,100 1 @ 2,400
	Architectural Draftsman	4	3 @ 1,950 1 @ 2,000
	Structural Steel Draftsman	1	1 @ 2,100
	Mechanical Draftsman	2	1 @ 1,750 1 @ 1,900
	Draftsman Helper	1	1 @ 1,750

IN THE SERVICE OF NEW YORK CITY

TABLE XVII—Continued

DEPARTMENT	TITLE	NUMBER	SALARIES
Board of Water Supply— Cont. City Aqueduct Department—Executive Division	Department Engineer	1	1 @ \$7,000
	Assistant Engineers	4	1 @ 2,000 1 @ 2,388 1 @ 2,700 1 @ 3,000
City Aqueduct—Manhattan Division	Topographical Draftsman	3	3 @ 1,650
	Transitman	1	1 @ 1,350
	Division Engineer	1	1 @ 4,500
	Assistant Engineers	13	2 @ 1,750 3 @ 1,788 3 @ 1,800 2 @ 2,000 3 @ 2,388 1 @ 3,000
	Transitman	1	1 @ 1,350
	Rodmen	4	4 @ 960
City Aqueduct—Bronx Division	Topographical Draftsman	1	1 @ 1,650
	Assistant Engineers	10	1 @ 1,650 1 @ 1,788 1 @ 2,000 2 @ 2,250 1 @ 2,700 1 @ 3,000
	Transitmen	2	2 @ 3,000
	Rodmen	3	3 @ 960
	Topographical Draftsman	1	1 @ 1,800
	Assistant Engineers	8	1 @ 1,750 1 @ 1,788 2 @ 2,000 1 @ 2,388 1 @ 2,400 1 @ 3,000
City Aqueduct—Conduit and Reservoir Division	Transitman	1	1 @ 4,900
	Rodman	6	6 @ 960
	Department Engineer	1	1 @ 7,000
	Assistant Engineers	15	1 @ 1,350 2 @ 1,650 2 @ 1,800 3 @ 2,000 2 @ 2,250 1 @ 2,400 3 @ 3,000
	Transitmen	6	1 @ 3,300 1 @ 1,200 5 @ 1,350
	Rodmen	7	7 @ 960
	Topographical Draftsman	1	1 @ 1,200
	Department Engineer	1	1 @ 5,400
	Division Engineer	1	1 @ 4,000
	Assistant Engineers	3	1 @ 2,000 1 @ 2,700 2 @ 3,000
Engineering—Northern Aqueduct	Transitman	1	1 @ 1,650
	Rodmen	5	5 @ 960
	Division Engineer	1	1 @ 5,000
	Assistant Engineers	11	1 @ 1,500 6 @ 1,788 1 @ 2,000 1 @ 2,388 1 @ 3,700 1 @ 3,000
Southern Aqueduct Department—Kensico Division	Transitman	2	2 @ 1,300
	Rodmen	11	11 @ 960

THE ENGINEER IN PUBLIC SERVICE

TABLE XVII—Continued

DEPARTMENT	TITLE	NUMBER	SALARIES	
<i>Board of Water Supply— Cond. Engineering, Southern Aqueduct Department —Executive, Croton and Hill View Division</i>	Division Engineers	2	1 @ \$4,000 1 @ 4,500	
	Assistant Engineers	14	2 @ 1,650	
			1 @ 1,798	
			2 @ 1,900	
			2 @ 2,000	
			2 @ 2,250	
			3 @ 2,400	
			1 @ 2,700	
			1 @ 3,000	
	Rodmen	2	2 @ 990	
<i>President, Borough of Man- hattan</i>	Consulting Engineer	2	2 @ 7,200	
	Consulting Engineers	1	1 @ 3,000	
Permit Division	Engineer	1	1 @ 2,700	
	Assistant Engineer	1	1 @ 1,920	
Sidewalk Division	Rodman	1	1 @ 1,050	
Bureau of Highways	Chief Engineer	1	1 @ 5,000	
	Assistant Engineers	9	1 @ 1,900	
			2 @ 2,100	
				1 @ 2,290
				1 @ 2,400
				1 @ 2,700
				1 @ 3,000
				1 @ 3,420
				1 @ 4,000
				5 @ 1,500
	Transitmen	6	1 @ 1,650	
	Leveler	1	1 @ 1,650	
	Rodmen	12	6 @ 900	
		6	6 @ 1,050	
	Axeman	6	6 @ 900	
	Topographical Draftsman	16	5 @ 1,200	
			8 @ 1,350	
		3 @ 1,500		
		2 @ 1,650		
		1 @ 1,900		
		1 @ 1,900		
Public Buildings and Office	Structural Steel Draftsman	1	1 @ 1,900	
	Assistant Engineers	6	1 @ 1,900	
			2 @ 2,100	
			1 @ 2,400	
			1 @ 3,150	
			1 @ 3,650	
Bureau of Sewers	Architectural Draftsman	1	1 @ 1,900	
	Engineer	1	1 @ 5,000	
	Assistant Engineers	7	1 @ 1,650	
			1 @ 2,290	
				1 @ 2,400
				1 @ 2,550
				1 @ 2,700
				1 @ 3,000
				1 @ 4,000
		Leveler	2	1 @ 1,020
		1	1 @ 1,200	
	Topographical Draftsman	23	10 @ 1,200	
			6 @ 1,320	
			1 @ 1,350	
			5 @ 1,500	
			1 @ 1,950	
	Transitmen	9	1 @ 1,200	
			1 @ 1,350	
			7 @ 1,500	
	Rodman	16	3 @ 900	
			10 @ 1,020	
			3 @ 1,050	
	Axemen	9	9 @ 900	
Topographical Bureau	Assistant Engineers	5	2 @ 2,100	
			1 @ 2,400	
			1 @ 2,550	
			1 @ 2,500	

IN THE SERVICE OF NEW YORK CITY

TABLE XVII—Continued

DEPARTMENT	TITLE	NUMBER	SALARIES		
<i>President, Borough of Manhattan—Cont.</i> Topographical Bureau	Transitman and Computers	4	4 @ \$1,500		
	Rodmen	10	4 @ 900 6 @ 1,050		
	Axemen	5	5 @ 900		
	Mechanical Draftsmen	2	1 @ 1,500 1 @ 1,650		
	Topographical Draftsmen	9	3 @ 1,200 4 @ 1,500 2 @ 1,650		
	Bureau of Buildings	Assistant Engineers	12	1 @ 1,620 2 @ 1,800 2 @ 1,950 1 @ 2,040 4 @ 2,400 1 @ 2,550 1 @ 3,000	
		Administration—Executive	Consulting Engineer	1	1 @ 7,200
			Assistant Engineer	1	1 @ 2,280
		Bureau of Design	Topographical Draftsman	1	1 @ 1,950
			Assistant Engineers	2	1 @ 2,700 1 @ 4,000
Structural Steel Draftsmen			4	1 @ 1,800 2 @ 1,860 1 @ 2,040	
Topographical Draftsmen	17		2 @ 1,350 1 @ 1,440 6 @ 1,500 6 @ 1,650 2 @ 1,800		
Mechanical Draftsmen	4		4 @ 1,800		
Bureau of Buildings	Assistant Engineers	2	1 @ 1,920 1 @ 2,400		
Bureau of Highways	Principal Assistant Engineer	1	1 @ 4,000		
	Assistant Engineers	10	1 @ 1,650 1 @ 1,950 2 @ 2,100 2 @ 2,250 2 @ 2,500 1 @ 3,000		
	Transitman	9	4 @ 1,500 1 @ 1,350 3 @ 1,650 1 @ 1,800		
	Transitman and Computers	2	2 @ 1,650		
	Levelers	6	5 @ 1,500 1 @ 1,650		
	Rodmen	14	2 @ 900 1 @ 1,050 4 @ 1,200 7 @ 1,350		
	Chainman and Rodman	2	2 @ 1,200		
	Axemen	5	2 @ 900 3 @ 1,050		
	Bureau of Sewers	Principal Assistant Engineer	1	1 @ 4,500	
		Assistant Engineers	12	2 @ 1,800 2 @ 1,950 1 @ 2,040 1 @ 2,400 4 @ 2,500 2 @ 3,300	
		Topographical Draftsman	2	2 @ 1,650	
		Transitman	4	2 @ 1,500 1 @ 1,650 1 @ 1,800	
		Transitman and Computers	2	1 @ 1,800 1 @ 1,500	
		Levelers	2	1 @ 1,650 1 @ 1,500	
		Rodmen	12	1 @ 900 1 @ 1,050 2 @ 1,200 8 @ 1,350	

THE ENGINEER IN PUBLIC SERVICE

TABLE XVII—Continued

DEPARTMENT	TITLE	NUMBER	SALARIES	
<i>President, Borough of The Bronx—Cont.</i>	Chainmen and Rodmen	2	1 @ \$1,300 1 @ 1,350	
	Azemen	2	1 @ 900 1 @ 1,050	
Chief Engineer of Sewers and Highways	Chief Engineer	1	1 @ 8,120	
Sewers and Highways—Maintenance	Assistant Engineer	1	1 @ 2,250	
	Assistant Engineers	3	1 @ 2,100 1 @ 3,000 1 @ 3,420	
	Transitmen	3	2 @ 1,500 1 @ 1,650	
	Topographical Draftsman	4	1 @ 1,350 2 @ 1,500 1 @ 1,650	
	Rodmen	4	1 @ 900 2 @ 1,050 1 @ 1,200	
	Topographical Bureau	Topographical Engineer	1	1 @ 4,000
		Assistant Engineers	11	1 @ 1,890 1 @ 1,850 3 @ 1,950 4 @ 2,100 1 @ 2,250 1 @ 3,240
		Transitmen	2	2 @ 1,500
		Transitman and Computers	2	2 @ 1,650
		Computers	2	1 @ 1,500 1 @ 1,800
Topographical Draftsman		14	2 @ 1,500 10 @ 1,650 1 @ 1,800 1 @ 1,950	
Levelers		2	2 @ 1,250	
Chainmen and Rodmen		5	1 @ 1,200 4 @ 1,350	
Rodmen		4	2 @ 1,050 2 @ 1,350	
<i>President, Borough of Brooklyn</i>		Consulting Engineer	1	1 @ 7,200
	Assistant Engineer	1	1 @ 3,000	
Division of Substructures	Assistant Engineers	2	1 @ 1,900 1 @ 4,500	
	Topographical Draftsman	2	1 @ 1,650 1 @ 1,800	
	Draftsman	2	1 @ 2,100 1 @ 1,900	
	Transitmen	2	1 @ 1,250 1 @ 1,850	
	Chainman and Rodman	1	1 @ 1,200	
	Rodmen	2	2 @ 1,050 1 @ 1,200	
	Bureau of Highways	Chief Engineer	1	1 @ 8,120
		Assistant Engineers	13	2 @ 1,800 2 @ 2,250 2 @ 2,400 1 @ 3,000 2 @ 3,420 3 @ 4,000
		Transitmen	6	2 @ 1,500 4 @ 1,600
		Topographical Draftsman	2	2 @ 1,500 1 @ 1,650
Leveler		1	1 @ 1,900	
Rodmen		4	4 @ 1,050	
Azemen		6	5 @ 900 1 @ 990	
Transitman and Computers		2	2 @ 1,800	
Transitmen		6	1 @ 1,500 3 @ 1,650 2 @ 1,800	

IN THE SERVICE OF NEW YORK CITY

TABLE XVII—Continued

DEPARTMENT	TITLE	NUMBERS	SALARIES
<i>President, Borough of Brooklyn—Cont.</i>			
Bureau of Highways	Topographical Draftsman	3	1 @ \$1,650 2 @ 1,800
	Rodmen	4	4 @ 1,200
	Axemen	6	5 @ 900 1 @ 1,140
Topographical Bureau	Chief Engineer	1	1 @ 6,000
	Assistant Engineers	15	1 @ 1,800 7 @ 2,100 2 @ 2,250 2 @ 2,700 3 @ 3,000
Bureau of Public Buildings and Offices	Assistant Engineers	2	1 @ 4,000 1 @ 3,000
Bureau of Sewers	Draftsman	1	1 @ 1,800
	Chief Engineer	1	1 @ 6,120
	Assistant Engineers	26	6 @ 1,800 8 @ 2,250 1 @ 2,280 3 @ 3,000 2 @ 4,000 2 @ 4,000 2 @ 4,000
	Transitmen	6	2 @ 1,800 3 @ 1,500 3 @ 1,050
	Levelers	3	4 @ 1,050 1 @ 1,200 1 @ 1,320
	Rodmen	13	1 @ 900 1 @ 1,800 10 @ 1,500 5 @ 1,650 4 @ 1,800
	Axeman	1	2 @ 1,350 1 @ 1,650
	Architectural Draftsman	1	1 @ 1,050
	Topographical Draftsman	10	2 @ 2,400 1 @ 2,700
	Mechanical Draftsman	3	1 @ 1,800 2 @ 1,350
Bureau of Buildings	Draftsman Helper	1	1 @ 1,050
	Assistant Engineers	2	1 @ 2,400 1 @ 2,700
<i>President, Borough of Queens</i>			
General Administration	Consulting Engineer	1	1 @ 7,200
	Assistant Engineer	1	1 @ 2,280
Topographical Bureau	Engineer in Charge	1	1 @ 5,280
	Assistant Engineers	32	4 @ 1,800 2 @ 1,950 1 @ 2,040 6 @ 2,100 1 @ 2,220 3 @ 2,280 2 @ 2,550 1 @ 2,850 1 @ 3,060 1 @ 4,000
	Transitmen and Computers	10	1 @ 1,200 2 @ 1,350 1 @ 1,440 4 @ 1,500 10 @ 1,650 1 @ 1,800 4 @ 350
	Topographical Draftsman	33	10 @ 1,500 2 @ 1,620 8 @ 1,650 9 @ 1,800 3 @ 1,800 2 @ 1,950 1 @ 2,000
	Computers	3	1 @ 1,200 1 @ 1,200 1 @ 1,200
	Rodmen	3	15 @ 900 1 @ 5,800
Bureau of Engineering—Construction—Highways	Axeman	18	
	Engineer in charge	1	1 @ 5,800
	Assistant Engineers	9	4 @ 1,800 2 @ 2,500 1 @ 2,550 1 @ 2,700 1 @ 3,000

THE ENGINEER IN PUBLIC SERVICE

TABLE XVII—Continued

DEPARTMENT	TITLE	NUMBER	SALARIES	
<i>President, Borough of Queens</i> — <i>Cont.</i> Bureau of Engineering— Construction—Highways	Draftsman	6	2 @ \$1,350 2 @ 1,500 1 @ 1,650 1 @ 1,800	
	Transitmen	4	2 @ 1,500 2 @ 1,150	
	Chainmen	3	3 @ 1,200	
	Rodmen	7	5 @ 1,050 2 @ 1,200	
	Axemen	8	8 @ 900	
	Assistant Engineers	11	2 @ 1,400 1 @ 1,550 1 @ 2,220 2 @ 2,250 2 @ 2,280 2 @ 2,700 1 @ 2,850	
	Topographical Draftsmen	26	1 @ 3,000 4 @ 1,350 13 @ 1,500 6 @ 1,650 3 @ 1,900 1 @ 1,200	
	Transitmen	4	2 @ 1,500 2 @ 1,650	
	Rodmen	3	3 @ 1,200	
	Axemen	5	5 @ 900	
	<i>President, Borough of Richmond</i> Bureau of Engineering	Engineer	1	1 @ 5,000
		Assistant Engineers	17	2 @ 1,650 2 @ 1,900 1 @ 1,900 2 @ 2,000 2 @ 2,250 1 @ 2,280 2 @ 2,400 2 @ 2,700 1 @ 3,000
		Transitmen	2	3 @ 1,350
Transitmen and Computers		2	2 @ 1,650	
Rodmen		6	3 @ 1,200 3 @ 1,350	
Axemen		8	8 @ 900	
Topographical Draftsmen		9	1 @ 1,200 1 @ 1,350 3 @ 1,650 3 @ 1,900 1 @ 2,000	
Junior Draftsman		1	1 @ 1,140	
Assistant Engineers		2	1 @ 2,000 1 @ 2,250	
Leveler		1	1 @ 1,650	
Transitman		1	1 @ 1,650	
Transitman and Computer		1	1 @ 1,650	
Bureau of Sewers Bureau of Street Cleaning <i>Commissioner of Accounts</i>		Efficiency Engineers	2	1 @ 4,000 1 @ 6,000
		Associate Efficiency Engineers	4	2 @ 2,400 2 @ 2,700 1 @ 2,100
		Examining Engineers	2	1 @ 2,400 1 @ 2,400
		Mechanical Engineer	1	1 @ 2,400
		Draftsman	2	2 @ 1,200
	Computer	1	1 @ 1,500	
	<i>Public Service Commission— First District</i> Secretary's Office	Junior Engineers	2	1 @ 1,501 1 @ 1,650
		Assistant Electrical Engineer	1	1 @ 1,950
		Junior Electrical Engineers	2	1 @ 1,201 1 @ 1,350
		Junior Assistant	1	1 @ 1,200



IN THE SERVICE OF NEW YORK CITY

TABLE XVII—Continued

DEPARTMENT	TITLE	NUMBER	SALARIES
<i>Public Service Commission— First District—Cont.</i>			
Bureau of Gas and Electricity	Chief Gas Engineer	1	1 @ \$3,600
	Junior Assistant	4	1 @ 901 1 @ 1,050 2 @ 1,200
Bureau of Equipment Inspection	Electrical Engineers	5	2 @ 3,300 1 @ 3,600 1 @ 4,200 1 @ 7,000
	Assistant Electrical Engineers	4	8 @ 1,801 1 @ 2,250
	Junior Electrical Engineers	97	43 @ 1,090 31 @ 1,201 20 @ 1,350 1 @ 1,500 2 @ 1,650
	Railway Engineers	5	4 @ 2,100 1 @ 3,000
	Junior Railway Engineers	2	2 @ 1,080
	Draftsman	1	1 @ 1,350
	Junior Assistant	1	1 @ 901
Engineering Department— Office of Chief Engineer	Chief Engineer	1	1 @ 20,000
	Engineer of Subway Construction	1	1 @ 12,000
	Deputy Engineer of Subway Construction	1	1 @ 8,000
	Assistant Division Engineers	2	2 @ 2,400
	Designing Engineer	1	1 @ 3,750
	Assistant Engineers	2	1 @ 1,950 1 @ 2,250
	Junior Engineers	5	1 @ 1,201 4 @ 1,501
	Junior Electrical Engineers	10	7 @ 1,080 1 @ 1,201 2 @ 1,350
	Railway Engineers	2	1 @ 2,100 1 @ 3,000
	Junior Railway Engineer	1	1 @ 1,080
	Draftsman	20	6 @ 1,201 1 @ 1,350 9 @ 1,501 4 @ 1,650
	Junior Assistant	17	10 @ 901 3 @ 1,050 2 @ 1,201 1 @ 1,350 1 @ 1,501
Engineering Department— Estimate Division	Assistant Division Engineer	1	1 @ 3,300
	Assistant Engineers	2	1 @ 1,901 1 @ 2,100
	Junior Engineers	3	1 @ 1,501 2 @ 1,650
	Draftsman	2	1 @ 1,650 1 @ 1,800
	Junior Assistant	5	2 @ 901 3 @ 1,200
Engineering Department— Division of Design	Principal Assistant Engineer	1	1 @ 7,000
	Designing Engineers	5	4 @ 3,750 1 @ 4,200
	Assistant Designing Engineers	5	5 @ 3,750
	Assistant Engineers	4	1 @ 1,950 1 @ 2,100 2 @ 2,250
	Junior Engineers	2	1 @ 1,501 1 @ 1,500
	Designers	27	2 @ 1,801 6 @ 1,950 10 @ 2,100 4 @ 2,250 5 @ 2,400

THE ENGINEER IN PUBLIC SERVICE

TABLE XVII—Continued

DEPARTMENT	TITLE	NUMBER	SALARY
Public Service Commission First District—Cont. Engineering Department —Division of Design	Draftsmen	178	64 @ \$1,201
			22 @ 1,350
			6 @ 1,500
			55 @ 1,501
			24 @ 1,650
	Architectural Designers	8	11 @ 1,800
			1 @ 1,950
			2 @ 2,100
			2 @ 2,250
			2 @ 2,400
	Architectural Draftsmen	55	33 @ 1,201
			4 @ 1,350
			8 @ 1,501
			6 @ 1,550
			4 @ 1,800
	Junior Assistants	71	47 @ 901
			21 @ 1,050
			3 @ 1,200
			1 @ 7,000
Engineering Department —First Division	Division Engineer	1	1 @ 4,200
			1 @ 2,700
	Senior Division Engineer	4	1 @ 3,300
			2 @ 3,750
	Assistant Division Engineers	12	1 @ 1,901
			2 @ 1,950
			1 @ 2,100
			2 @ 2,250
			1 @ 2,400
	Assistant Engineers	45	8 @ 1,201
			6 @ 1,350
			3 @ 1,500
			10 @ 1,501
			11 @ 1,650
	Junior Engineers	2	1 @ 1,900
			1 @ 1,201
			1 @ 1,900
			25 @ 901
			19 @ 1,050
	Draftsmen	2	1 @ 1,201
1 @ 1,900			
Junior Assistants	54	25 @ 901	
		10 @ 1,200	
Engineering Department —Second Division	Division Engineer	1	1 @ 7,000
	Senior Assistant Division Engineer	4	1 @ 4,200
			2 @ 2,490
	Assistant Division Engineers	16	2 @ 2,300
			5 @ 1,901
			5 @ 1,950
			4 @ 2,100
			2 @ 2,250
	Assistant Engineers	52	19 @ 1,201
			6 @ 1,350
			1 @ 1,500
			15 @ 1,501
			5 @ 1,650
	Junior Engineers	1	2 @ 1,900
			1 @ 1,900
	Franchise Draftsmen	2	1 @ 1,900
			1 @ 1,501
	Draftsmen	72	52 @ 901
			12 @ 1,050
Junior Assistants	1	8 @ 1,200	
		1 @ 7,000	
Engineering Department —Third Division	Division Engineer	1	1 @ 4,200
			1 @ 2,490
	Senior Assistant Engineer	4	1 @ 2,700
			1 @ 2,300
	Assistant Division Engineers	13	1 @ 2,300
			1 @ 3,750
			6 @ 1,801
			2 @ 1,950
			2 @ 2,100
	2 @ 2,250		

IN THE SERVICE OF NEW YORK CITY

TABLE XVII—Continued

DEPARTMENT	TITLE	NUMBERS	SALARIES
Public Service Commission— First District—Cont. Engineering Department —Third Division	Junior Engineers	44	9 @ \$1,201
			5 @ 1,350
			4 @ 1,500
			18 @ 1,501
	Draftsmen	2	4 @ 1,800
			1 @ 1,350
	Junior Assistants	66	1 @ 1,800
			36 @ 901
			19 @ 1,050
	Engineering Department Sixth Division	Division Engineer	1
Assistant Division Engineers		3	1 @ 7,000
			1 @ 2,400
Resident Engineers		7	1 @ 3,300
			1 @ 3,750
Tunnel Engineer		1	7 @ 3,001
Assistant Engineers		15	1 @ 2,400
			8 @ 1,801
Junior Engineers		87	5 @ 1,950
			1 @ 2,100
	4 @ 2,250		
	14 @ 1,201		
	6 @ 1,350		
	1 @ 1,500		
	31 @ 1,501		
	4 @ 1,650		
	1 @ 1,800		
	Draftsmen		4
1 @ 1,500			
Junior Assistants	208	2 @ 1,501	
		250 @ 901	
		23 @ 1,050	
Engineering Department —Seventh Division	Division Engineer	1	20 @ 1,200
	Assistant Division Engineers	4	1 @ 7,000
			1 @ 2,400
	Assistant Engineers	17	2 @ 3,750
			1 @ 4,200
	Junior Engineers	36	4 @ 1,801
			7 @ 1,950
			2 @ 2,100
			1 @ 2,101
			2 @ 2,250
1 @ 2,400			
15 @ 1,201			
7 @ 1,350			
2 @ 1,500			
14 @ 1,502			
Draftsmen	3	18 @ 1,650	
		2 @ 1,201	
Junior Assistants	68	1 @ 1,500	
		62 @ 901	
		1 @ 900	
Engineering Department —Division of Subur- sance Structures	Engineer	1	21 @ 1,050
	Assistant Engineers	8	14 @ 1,200
1 @ 4,500			
Junior Engineers	10	1 @ 1,950	
		3 @ 2,100	
		2 @ 2,250	
		2 @ 2,400	
		3 @ 1,201	
Draftsmen	4	1 @ 1,350	
		3 @ 1,500	
		3 @ 1,550	
Junior Assistants	44	3 @ 1,201	
		1 @ 1,500	
		23 @ 901	
			12 @ 1,050
			7 @ 1,200

THE ENGINEER IN PUBLIC SERVICE

TABLE XVII—Continued

DEPARTMENT	TITLE	NUMBER	SALARIES		
Public Service Commission First District—Cont. Engineering Department —Material Inspection	Assistant Engineers	2	1 @ \$1,901 1 @ 2,250		
	Junior Engineers	10	3 @ 1,201 5 @ 1,501 1 @ 1,650 1 @ 1,800 1 @ 3,000		
	Railway Engineer	1	1 @ 1,250		
	Draftsman	1	1 @ 901		
	Junior Assistants	10	10 @ 901		
	Division Engineer	1	1 @ 5,500		
	Engineering Department —Sewer Division	Senior Assistant Division Engineer	1	1 @ 3,300	
		Assistant Division Engineer	2	2 @ 3,750	
		Assistant Engineer	7	1 @ 1,801 2 @ 1,650 1 @ 2,100 3 @ 2,250	
		Junior Engineers	16	2 @ 1,201 4 @ 1,350 5 @ 1,501 3 @ 1,650	
		Draftsmen	22	2 @ 1,900 6 @ 1,201 6 @ 1,350 5 @ 1,501 3 @ 1,650	
		Junior Assistants	56	2 @ 1,800 22 @ 901 15 @ 1,050 1 @ 1,190 10 @ 1,200	
		Department of Health Bureau of Engineering Supervision	Assistant Engineer	1	1 @ 2,400
			Sanitary Engineer	1	1 @ 2,400
Department of Correction Executive		Assistant Engineer	1	1 @ 3,190	
		Mechanical and Fuel Engineer	1	1 @ 3,000	
		Supervising Engineer	1	1 @ 1,800	
Department of Water Supply, Gas and Electricity Administration		Consulting Engineer	1	1 @ 4,000	
		Chief Engineer	1	1 @ 10,000	
Bureau of Water Supply —Executive		Deputy Chief Engineer	1	1 @ 7,500	
	Assistant Engineer	1	1 @ 2,100		
	Draftsman	1	1 @ 1,050		
	Chairman	1	1 @ 1,500		
	Assistant Engineer	1	1 @ 1,950		
Bureau of Water Supply —Real Estate Bureau of Water Supply —Design	Assistant Engineers	6	2 @ 1,800 1 @ 2,000 1 @ 2,100 1 @ 2,500		
	Mechanical Engineers	2	1 @ 2,250 1 @ 2,040		
	Draftsmen	14	1 @ 2,100 7 @ 900 1 @ 1,350 2 @ 1,500 2 @ 1,650 1 @ 1,900 1 @ 2,100		
	Transitman	1	1 @ 1,800		
	Rodman	1	1 @ 1,050		
	Axemen	2	2 @ 600		
	Assistant Engineers	2	1 @ 2,400 1 @ 2,000		
	Bureau of Water Supply —Borough Engineer, Manhattan and The Bronx				

IN THE SERVICE OF NEW YORK CITY

TABLE XVII—Continued

DEPARTMENT	TITLE	NUMBER	SALARIES	
<i>Department of Water Supply, Gas and Electricity— Cont.</i> Distribution—Manhattan and The Bronx	Assistant Engineers	9	5 @ \$1,800 1 @ 2,400 1 @ 2,700	
		Draftsmen	5	2 @ 3,300 2 @ 900 1 @ 1,200 1 @ 1,500 1 @ 1,800
			Transitman	1
	Rodmen		6	2 @ 1,050 4 @ 1,200
	Pumping—Manhattan Bureau of Water Supply —Collection and Storage	Axeman	1	1 @ 900
		Mechanical Engineer	1	1 @ 1,800
		Assistant Engineers	5	2 @ 1,800 2 @ 2,280 1 @ 3,180
	Street Lighting	Transitman	1	1 @ 1,500
		Leveler	1	1 @ 1,500
		Rodman	1	1 @ 1,200
Illumination, Light, Heat and Power—Executive	Draftsman	4	2 @ 1,050 1 @ 1,200 1 @ 1,800	
	Chief Engineer	1	1 @ 6,120	
	Assistant Engineer	1	1 @ 3,000	
Lamp and Lighting— Public Buildings	Assistant Electrical Engineer	1	1 @ 2,280	
	Draftsmen	2	2 @ 900	
	Electrical Inspection	1	1 @ 4,500	
Borough Engineer— Brooklyn	Assistant Engineers	2	1 @ 2,400 1 @ 4,500	
	Distribution—Brooklyn	Assistant Engineers	4	1 @ 1,500 1 @ 1,650 1 @ 2,280 1 @ 3,000
		Transitman	1	1 @ 1,740
Rodman		5	4 @ 1,050 1 @ 1,200	
Collection and Storage— Brooklyn	Draftsmen	4	4 @ 900	
	Assistant Engineer	1	1 @ 2,280	
	Draftsman	1	1 @ 1,800	
Pumping—Brooklyn	Rodmen	2	2 @ 1,050 2 @ 1,300	
	Supervising Engineers	3	1 @ 2,500 1 @ 3,980 1 @ 900	
	Assistant Engineer	1	1 @ 1,500	
Borough Engineer— Queens	Draftsmen	2	1 @ 900 1 @ 1,500	
	Rodman	1	1 @ 900	
	Transitman	2	1 @ 1,500 1 @ 1,740	
Bureau of Water Supply —Construction—Borough of Queens	Transitman	1	1 @ 1,800	
	Leveler	1	1 @ 1,200	
	Rodman	2	2 @ 1,200	
Borough Engineer—Rich- mond	Draftsman	1	1 @ 900	
	Assistant Engineers	2	1 @ 2,040 1 @ 4,000	
	Bureau of Water Supply —Construction—Rich- mond	Transitman	1	1 @ 1,200
Rodman		1	1 @ 1,200	
Axeman		1	1 @ 900	
Distribution—Richmond	Draftsman	1	1 @ 1,800	
	Assistant Engineer	1	1 @ 900	
	Draftsman	1	1 @ 1,200	
Pumping—Borough of Richmond	Leveler	1	1 @ 1,050	
	Rodman	1	1 @ 1,100	
	Supervising Engineer	1	1 @ 2,100	
Fire Department Chief of Department	Draftsman	1	1 @ 1,800	

THE ENGINEER IN PUBLIC SERVICE

TABLE XVII—Concluded

DEPARTMENT	TITLE	NUMBER	SALARIES
<i>Fire Department—Cont.</i>	<i>Fire Prevention—Inspection</i>	4	2 @ \$1,800
			1 @ 2,280
	Assistant Electrical Engineers	5	1 @ 2,400
			1 @ 1,620
			2 @ 1,740
			1 @ 2,460
<i>Fire Alarm Telegraph Bureau—Borough of Manhattan</i>	Electrical Engineers	6	2 @ 1,800
			1 @ 2,400
	Draftsmen	14	1 @ 3,000
			1 @ 3,420
			1 @ 6,600
			2 @ 900
			2 @ 1,020
			1 @ 1,140
			4 @ 1,260
			2 @ 1,500
1 @ 1,620			
Bureau of Repairs and Supplies—Division of Apparatus—Manhattan, Bronx and Richmond	Architectural Draftsmen	2	2 @ 1,500
	Mechanical Draftsman	1	1 @ 1,320
Bureau of Repairs and Supplies—Division of Buildings	Architectural Draftsmen	3	1 @ 1,500
			1 @ 2,280
<i>Belleuve and Allied Hospitals</i>	Supervising Engineer's—Division	1	1 @ 1,800
<i>Police Department</i>			Administration
	Chief Engineer	1	1 @ 1,500
			1 @ 1,500
			1 @ 1,350
			2 @ 1,200
<i>Department of Public Charities</i>	Chief Engineer	1	1 @ 4,000
			1 @ 1,000
			2 @ 1,500
	Draftsmen	3	

TABLE XVIII  
 NUMBER OF ENGINEERS IN EACH DEPARTMENT, NEW YORK  
 CITY, JUNE 30, 1916

	NUMBER OF ENGINEERS, ETC.	DEPART- MENTAL TOTAL
<i>Department of Finance</i>		
Engineering Division	16	16
<i>Department of Street Cleaning</i>		
Borough of Manhattan	4	4
<i>Department of Taxes and Assessments</i>		
Block Tax Assessment Maps	23	23
<i>Board of Assessors</i>		
Board of Assessors	1	1
<i>Department of Education</i>		
Bureau of Supplies	1	
Bureau of Buildings	55	
Borough of Brooklyn	13	
Borough of Queens	2	
Borough of Richmond	1	
Division of Reference and Research	1	
		73
<i>Department of Docks and Ferries</i>		
General Administration	1	
Bureau of Engineering	51	
Bureau of Ferries	1	
Bureau of Mechanical Engineering	2	
Bureau of Supplies	1	
		56
<i>Department of Plant and Structures</i>		
Engineering Staff	39	39
<i>Department of Parks</i>		
Manhattan and Richmond	14	
Borough of The Bronx	2	
Brooklyn Administration	9	
Borough of Queens, Administration	4	
		29
<i>Board of Estimates and Apportionment</i>		
Bureau of Public Improvements	16	
Bureau of Franchises	6	
Bureau of Standards	5	
Bureau of Contract Supervision	15	
Bureau of Contract Supervision, Central Testing Laboratory	1	
Bureau of Contract Supervision, Division of Sup- plies	2	
Committee on the City Plan	5	
Committee on Pensions	2	
Bureau of Claims	2	
		54

THE ENGINEER IN PUBLIC SERVICE

TABLE XVIII—Continued

	NUMBER OF ENGINEERS, ETC.	DEPART- MENTAL TOTAL
<i>Board of Water Supply</i>		
Engineering—Headquarters	76	
City Aqueduct Department, Executive Division	8	
City Aqueduct, Manhattan Division	20	
City Aqueduct, Bronx Division	16	
City Aqueduct, Conduit and Reservoir Division	15	
Engineering—Reservoir	30	
Engineering—Northern Aqueduct	11	
Southern Aqueduct Department—Kensico Division	25	
Engineering—Southern Aqueduct Department, Executive, Croton and Hillview Division	18	
	—	219
<i>President, Borough of Manhattan</i>		
Consulting Engineer	4	
Permit Division	1	
Sidewalk Division	1	
Bureau of Highways	52	
Public Buildings and Offices	7	
Bureau of Sewers	67	
Topographical Bureau	35	
Bureau of Buildings	12	
	—	179
<i>President, Borough of The Bronx</i>		
Administration—Executive	3	
Bureau of Designs	27	
Bureau of Buildings	2	
Bureau of Highways	49	
Bureau of Sewers	39	
Chief Engineer of Sewers and Highways	2	
Sewers and Highways—Maintenance	14	
Topographical Bureau	43	
	—	179
<i>President, Borough of Brooklyn</i>		
General Administration	2	
Division of Substructures	13	
Bureau of Highways	55	
Topographical Bureau	16	
Bureau of Public Buildings and Offices	3	
Bureau of Sewers	74	
Bureau of Buildings	2	
	—	165
<i>President, Borough of Queens</i>		
General Administration	2	
Topographical Bureau	99	
Bureau of Engineering Construction—Highways	38	
Engineering Construction—Division of Sewers	49	
	—	188
<i>President, Borough of Richmond</i>		
Bureau of Engineering	47	
Bureau of Highways	3	
Bureau of Street Cleaning	1	
Bureau of Sewers	1	
	—	52



TABLE XVIII—Continued

	NUMBER OF ENGINEERS, ETC.	DEPART- MENTAL TOTAL
<i>Commissioner of Accounts</i>		
Commissioner of Accounts	12	
		12
<i>Public Service Commission—First District</i>		
Secretary's Office	6	
Bureau of Gas and Electricity	5	
Bureau of Equipment Inspection	116	
Engineering Department—Office of Chief Engineer	63	
Engineering Department—Estimate Division	13	
Engineering Department—Division of Design	354	
Engineering Department—First Division	120	
Engineering Department—Second Division	149	
Engineering Department—Third Division	131	
Engineering Department—Sixth Division	388	
Engineering Department—Seventh Division	169	
Engineering Department—Division of Subsurface Structures	67	
Engineering Department—Material Inspection	24	
Engineering Department—Sewer Division	107	
		1,710
<i>Department of Health</i>		
Bureau of Engineering Supervision	1	
Sanitary Bureau	1	
		2
<i>Department of Correction</i>		
Executive	3	
		3
<i>Department of Water Supply, Gas and Electricity</i>		
Administration	1	
Bureau of Water Supply—Executive	5	
Bureau of Water Supply—Real Estate	1	
Bureau of Water Supply—Design	26	
Bureau of Water Supply, Borough Engineer		
Manhattan and The Bronx	2	
Distribution—Manhattan and The Bronx	22	
Pumping—Manhattan	1	
Bureau of Water Supply—Collection and Storage	8	
Street Lighting	4	
Illumination, Light, Heat and Power—Executive	3	
Lamp and Lighting—Public Buildings	2	
Electrical Inspection	1	
Borough Engineer—Brooklyn	2	
Distribution—Brooklyn	14	
Collection and Storage—Brooklyn	4	
Pumping—Brooklyn	3	
Borough Engineer—Queens	6	
Bureau of Water Supply—Construction—Borough of Queens	5	
Borough Engineer—Richmond	2	
Bureau of Water Supply, Construction—Richmond	5	
Distribution—Richmond	4	
Pumping—Borough of Richmond	1	
		128

THE ENGINEER IN PUBLIC SERVICE

TABLE XVIII—Concluded

	NUMBER OF ENGINEERS, ETC.	DEPART- MENTAL TOTAL
<i>Fire Department</i>		
Fire Prevention—Inspection	9	
Chief of Department	1	
Fire Alarm Telegraph Bureau—Borough of Man- hattan	22	
Bureau of Repairs and Supplies—Division of Apparatus—Manhattan, Bronx and Richmond	1	
Bureau of Repairs and Supplies—Division of Buildings	3	36
<i>Bellevue and Allied Hospitals</i>		
Supervising Engineer's Division	1	1
<i>Police Department</i>		
Administration	5	5
<i>Department of Public Charities</i>		
Chief Engineer	4	4
Grand Total		3,172

IN THE SERVICE OF NEW YORK CITY

TABLE XIX

NUMBERS AND SALARIES, ENGINEERING POSITIONS, NEW YORK CITY, JUNE 30, 1916

NUMBER	SALARIES	TOTAL SALARIES	NUMBER	SALARIES	TOTAL SALARIES
125 <sup>1</sup>	\$ 900.00	\$112,500.00	26	\$2,280.00	\$59,280.00
543	901.00	489,234.00	6	2,355.00	14,130.00
5	915.83	4,597.15	10	2,388.00	23,880.00
40	960.00	38,400.00	62	2,400.00	148,800.00
1	1,000.00	1,000.00	11	2,460.00	27,060.00
14	1,020.00	14,280.00	12	2,500.00	30,000.00
1	1,046.67	1,046.67	8	2,550.00	20,400.00
213	1,050.00	223,650.00	1	2,580.00	2,580.00
67	1,080.00	72,960.00	2	2,616.67	5,233.14
6	1,140.00	6,840.00	41	2,700.00	110,700.00
183	1,200.00	219,600.00	3	2,850.00	8,550.00
219	1,201.00	263,019.00	55	3,000.00	165,000.00
7	1,260.00	8,820.00	7	3,001.00	21,007.00
1	1,308.33	1,308.33	1	3,150.00	3,150.00
8	1,320.00	10,560.00	3	3,180.00	9,540.00
175	1,350.00	236,250.00	1	3,250.00	3,250.00
1	1,439.17	1,439.17	18	3,300.00	59,400.00
2	1,440.00	2,880.00	7	3,420.00	23,940.00
163	1,500.00	244,500.00	4	3,500.00	14,000.00
190	1,501.00	285,190.00	8	3,600.00	28,800.00
2	1,560.00	3,120.00	1	3,650.00	3,650.00
2	1,570.00	3,140.00	13	3,750.00	48,750.00
2	1,590.00	3,180.00	1	3,960.00	3,960.00
8	1,600.00	12,800.00	30	4,000.00	120,000.00
6	1,620.00	9,720.00	6	4,200.00	25,200.00
205	1,650.00	338,250.00	1	4,300.00	4,300.00
1	1,680.00	1,680.00	9	4,500.00	40,500.00
5	1,740.00	8,700.00	2	4,560.00	9,120.00
7	1,750.00	12,250.00	1	4,680.00	4,680.00
18	1,788.00	32,184.00	11	5,000.00	55,000.00
204	1,800.00	367,200.00	1	5,280.00	5,280.00
20	1,801.00	52,220.00	1	5,400.00	5,400.00
42	1,831.67	76,934.14	1	5,500.00	5,500.00
1	1,850.00	1,850.00	3	6,000.00	18,000.00
4	1,860.00	7,440.00	4	6,120.00	24,480.00
3	1,920.00	5,760.00	2	6,500.00	13,000.00
54	1,950.00	105,300.00	1	6,600.00	6,600.00
1	1,982.50	1,982.50	9	7,000.00	63,000.00
1	1,980.00	1,980.00	6	7,200.00	43,200.00
29	2,000.00	58,000.00	4	7,500.00	30,000.00
6	2,040.00	12,240.00	1	8,000.00	8,000.00
5	2,193.33	10,966.65	2	9,000.00	18,000.00
102	2,100.00	214,300.00	1	10,000.00	10,000.00
1	2,101.00	2,101.00	2	12,000.00	24,000.00
3	2,200.00	6,600.00	1	16,000.00	16,000.00
2	2,220.00	4,440.00	1	20,000.00	20,000.00
2	2,224.17	4,448.34			
62	2,250.00	139,500.00	3,172		\$5,139,466.99

TABLE XX  
 NUMBER OF APPOINTMENTS FROM COMPETITIVE ELIGIBLE LISTS  
 TO ENGINEERING POSITIONS, NEW YORK CITY, 1908-1915

TITLE	1908	1909	1910	1911	1912	1913	1914	1915	TOTAL
Architectural Designer, Grade E					1				1
Architectural Designer, Grade E, as Architectural Draftsman, Grade D						1			1
Architectural Draftsman				2					2
Architectural Draftsman, Grade B					2				2
Architectural Draftsman, Grade C					8				8
Architectural Draftsman, Grade D							1		1
Assistant Electrical Engineer				3					3
Assistant Electrical Engineer, Grade D					3				3
Assistant Electrical Engineer, Grade D, as Electrical Inspector, Grade D						1			1
Assistant Electrical Engineer, Grade E					1	2			3
Assistant Electrical Engineer, Grade E, as Plan Examiner, Electrical, Grade C								1	1
Assistant Engineer, Board of Water Supply	48	42							90
Assistant Engineer, Bureau of Buildings		2							2
Assistant Engineer, Bureau of Buildings, Grade D				8	1				9
Assistant Engineer, Bureau of Buildings, Grade E					3				3
Assistant Engineer, Designer Board of Water Supply		3	5						8
Assistant Engineer, Designer Board of Water Supply	1								1
Assistant Engineer, Grade C						7	1		8
Assistant Engineer in charge of Section, Board of Water Supply		4	3						7
Assistant Engineer, knowledge of Sewage Disposal, Grade D						1	1		2
Assistant Engineer, Pitometer, Grade D					4				4
Assistant Engineer, Pitometer, Grade E					3				3
Associate Efficiency Engineer, Grade E								2	2
Azeman	26	50	23						99
Azeman, Board of Water Supply			1						1
Azeman, Grade B					24	6	1		31
Draftsman's Helper (changed to Junior Draftsman)	4								4
Electrical Engineer				1					1
Junior Architectural Draftsman, Grade B						8	1		9
Junior Draftsman		2	16	1					19
Junior Mechanical Draftsman		4		20					24
Junior Mechanical Draftsman, Grade B					20	8	7		35
Junior Topographical Draftsman, Grade B						7	3	1	11
Mechanical Draftsman, Electrical			2	3					5
Mechanical Draftsman, Electrical, Grade C					7	1	2		10
Mechanical Draftsman, Electrical, Grade C, as Architectural Draftsman, Grade B						2			2
Mechanical Draftsman, Grade B					1				1
Mechanical Draftsman, Grade C					1				1
Mechanical Draftsman, Grade D									
Mechanical Draftsman, Heating and Ventilating	3	1	3	2					9
Mechanical Draftsman, Heating and Ventilating, Grade C					3				3
Mechanical Draftsman, Sanitary	1		1	2					4
Mechanical Draftsman, Sanitary, Grade B							1		1
Mechanical Draftsman, Sanitary, Grade C					2	3			5
Mechanical Draftsman, Sanitary, Grade D					1				1
Mechanical Engineer				1					1
Mechanical Engineer, Grade D					2				2
Mechanical Engineer, Grade D, as Inspector of Heating and Ventilating, knowledge of sheet metal work, Grade D						1	1		2
Mechanical Engineer, Grade E									
Rodman		28		26					54
Rodman, Board of Water Supply			62						62
Rodman, Grade B					40		15		55
Rodman, Grade C					2				2
Structural Steel Draftsman			1	2	8				11
Structural Steel Draftsman, Grade C					1				1
Structural Steel Draftsman, Grade D						1			1
Transmitman				2					2
Transmitman, Grade C					1				1
Topographical Draftsman	2	37	7	13					59
Topographical Draftsman, Grade C					28	3	37		68



TABLE XXI—Continued

TITLE OF POSITION	AGE, PHYSICAL QUALIFICATIONS, RESIDENCE	EDUCATION, TRAINING AND EXPERIENCE	CONTENT OF EXAMINATION AND RELATIVE WEIGHTS	SALARY
Electrical Engineer, Assistant	Minimum age, 21.		Experience, 4. Technical, 6.	\$1,800
Electrical Engineer, Assistant, Grade B	Minimum age, 24.	Required, education of an electrical engineer, and practical experience in the construction and management of fire alarm and lighting circuits, including construction of subways, planning circuits and extension of lights and power lines. Thorough knowledge of the conditions of illumination is essential. Candidates should have had administrative experience and be competent to prepare specifications and estimates of cost of installation of electric equipment.	Technical, 5. Experience, 3. Arithmetic, 2.	\$3,000
Engineer with knowledge of Sewage Disposal	Minimum age, 21. Physical examination required.	Must be thoroughly familiar with the particular problem of New York city and the plans heretofore offered for its solution; should have an intimate knowledge of the different methods of sewage treatment generally recognized as most successful; should know the general methods of solution adopted by other tidal water cities in this country and with the main drainage systems of forum cities.	Experience, 5. Technical consisting of a test along the lines indicated under experience, together with the writing of a report for discussion of some phase of the problem of river or harbor pollution as applied to the surrounding waters of this city, 5.	\$1,000
Engineer with knowledge of Sewage Disposal, Assistant	Minimum age, 25.	Required, 3 years' civil engineering experience, fundamental education in engineering, experience and operation in the construction and operation of sewage disposal plant, and investigating sanitary operations for work similar to that of a sanitary expert, and familiarity with chemical and bacteriological investigations in connection with sewage purification.	Technical, 5. Mathematics, 1. Reports, 1. Experience, 3.	\$3,700

Mechanical Engineer	Minimum age, 21.	Must be graduate of technical school and have had drafting-room experience on details of mechanical appliances, and 5 years' experience in assembling and erection of units connected with steam plants, and be familiar with the mechanical equipment of public buildings.	Technical, 5. Experience, 3. Arithmetic, 2.	\$2,550
Sanitary Engineer, Department of Street Cleaning, Grade E	Between 25 and 50.	Required, thorough knowledge in sanitary engineering, relation of street cleaning and refuse collection to health, best methods of handling and disposal of refuse, organization and control of large groups of municipal employes, and the carrying out of large business undertakings. Candidates should have a general knowledge of laboratory investigation, of civil engineering relating to pavement construction, and mechanical engineering relating to the methods of handling refuse. They should also have broad general education, extension reading and study, and travel and observation in this and other countries.	Technical, 5. Experience, 5.	\$5,000
Engineer Inspector, Civil, Grades C and D	Minimum age, 21.	Required, knowledge of the laws and ordinances governing the regulating, grading and paving of streets, building of vaults, removal of encumbrances, and making of sewer connections; should have experience as inspector, contractor, or employe on public work, and some knowledge of surveying for establishing grades.	Technical, 5. Experience, 3. Arithmetic, including surveying notes, 2.	\$1,200-1,800
Engineer Inspector, Architectural, Grades C and D	Minimum age, 25.	Required, 5 years' experience as architect, engineer, or inspector of buildings; credit given for technical graduation. Expected and intimate knowledge of engineering fundamental of construction; the practice of the bureau of buildings; the structural requirements of the building code, calculations of loads on beams, columns and struts and ability to read plans.	Technical, 5. Experience, 3. Mathematics, 2.	\$1,200-1,800

IN THE SERVICE OF NEW YORK CITY

TABLE XXI—Continued

TITLE OF POSITION	AGE, PHYSICAL QUALIFICATIONS, RESIDENCE	EDUCATION, TRAINING AND EXPERIENCE	CONTENT OF EXAMINATION AND RELATIVE WEIGHTS	SALARY
Engineer, Assistant, Grade C	Minimum age, 20.	Required, experience in surveying, design or construction work; familiarity with simple surveys within the city, ordinary processes of engineering and construction, hydraulics, and the principles of electricity. Should be able to solve trigonometrical problems, areas, calculate stresses in members of elementary trusses, and should have a knowledge of structural material and methods of excavation. Time spent at technical college may be accepted as 1 year's experience.	Technical, 5. Experience, 3. Mathematics, 2.	\$1,350
Engineer, Assistant, Grades D and E	Minimum age, 21.	Must be civil engineers of 3 years' experience.	Technical, 5. Experience, 3. Mathematics, 1. Report, 1.	\$1,800-2,400
Engineer, Assistant, Board of Water Supply, Grade C	Minimum age, 21.		Technical, 50. Experience, 20. Mathematics, 15. Report, 15.	\$1,350
Engineer, Assistant, Bureau of Buildings, Grades D and E	Minimum age, 25.	Must be civil engineers of at least 3 years' experience; should be familiar with all structural details of important building construction, and have a knowledge of the fundamental requirements of the building law. They should have had experience in the executive control of technical employes and general business relations with non-technical men.	Technical, 5. Experience, 3. Mathematics, 1. Report, 1.	\$1,800-2,400
Engineer, Assistant, Bureau of Buildings	Minimum age, 30.	Same as Grades D and E.	Same as Grades D and E	\$4,000



Engineer, Assistant, on Pitometer and Water Waste Work, Grade D	Minimum age, 21. Open to non-residents.	Required, thorough knowledge of the principles of practice of hydraulics. Familiarity with the methods and practice of measuring flow of water by gauges, pitometer and meter, and of calculating the discharge and slip of pumps, and capability to interpret results of pitometer tests on water mains, and competency to direct men for investigations of water waste. Must have 8 months' experience with pitometer or 4 months with pitometer, and 1 year with the pitotube or similar current meters; 5 years' experience as assistant engineer is required.	\$1,500	
Engineer, Assistant, on Pitometer and Water Waste Work, Grade E	Minimum age, 24. Open to non-residents.	Same as Grade D, except 3 years' experience in water waste work required in addition to the requirements for Grade D.	\$2,400-3,000	
Engineer, Assistant, Power Plant Supervision, Grade E	Minimum age, 25. Open to residents of New York State. Physical examination required.	Required, experience as an engineer in the design, construction, and operation of a power plant, or in the investigational work of power plant efficiency. Part of this experience must have been in charge of power plant operation requiring administrative and executive ability. Credit is given to holders of technical degree.	Experience, 5. Technical, 3. Oral examination, 2.	\$2,280-3,180
Engineer, Chief, Department of Parks, Grade E	Between 26 and 50. Open to residents of New York State.	Required, experience with municipal engineering work, particularly construction and maintenance of parks, and organization and control of public works.	Experience, 5. Technical, 5. Questions on general knowledge of engineering, landscape architecture and special knowledge of grading, highway construction, drainage, water supply, and other engineering and executive matters pertaining to the construction and maintenance of parks.	\$4,000
Efficiency Engineer, Associate	Minimum age, 21. Physical examination required.	Required, 2 years spent in study in an approved school of engineering; at least 2 years' experience in direct or managerial charge of labor forces on construction or repair work.	Experience, 5. Mental test, 5. Duties include analysis of the functions of work in municipal departments; determination and introduction of improvements in organization; methods and procedure based upon fundamental principles of scientific management; design and installation of improved directional stationing and cost accounting forms, and the preparation of estimates and reports.	\$2,400

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IN THE SERVICE OF NEW YORK CITY

TABLE XXI—*Concluded*

TITLE OF POSITION	AGE, PHYSICAL QUALIFICATIONS, RESIDENCE	EDUCATION, TRAINING AND EXPERIENCE	CONTENT OF EXAMINATION AND RELATIVE WEIGHTS	SALARY
Electrical Engineer, Assistant	Minimum age, 21.		Experience, 4. Technical, 6.	\$1,800
Electrical Engineer, Assistant, Grade E	Minimum age, 24.	Required, education of an electrical engineer, and practical experience in the construction and management of fire alarm and lighting circuits, including construction of subways, planning circuits and extension of light and power lines. Thorough knowledge of the conditions of the illumination is essential. Candidates should have had administrative experience and be competent to prepare specifications and estimates of cost of installation of electric equipment.	Technical, 5. Experience, 3. Arithmetic, 2.	\$3,000
Engineer with knowledge of Sewage Disposal	Minimum age, 21. Physical examination required.	Must be thoroughly familiar with the particular problem of New York city and the plans heretofore offered for its solution; should have an intimate knowledge of the different methods of sewage treatment generally recognized as most successful; should know the general methods of solution adopted by other tidal water cities in this country and with the main drainage systems of forum cities.	Experience, 5. Technical consisting of a test along the lines indicated under experience, together with the writing of a report for discussion of some phase of the problem of river or harbor pollution as applied to the surrounding waters of this city, 5.	\$4,000
Engineer with knowledge of Sewage Disposal Assistant	Minimum age, 20.	Required, 3 years' civil engineering, fundamental education engineering, experience and operation in the construction and operation of sewage disposal plant, and investigating sanitary operations for work similar to that of a sanitary expert, and familiarity with chemical and bacteriological investigations in connection with sewage purification.	Technical, 5. Mathematics, 1. Report, 1. Experience, 3.	\$2,700

Mechanical Engineer	Minimum age, 21.	Must be graduate of technical school and have had drafting-room experience on details of mechanical appliances, and 3 years' experience in assembling and erection of units connected with steam plants, and be familiar with the mechanical equipment of public buildings.	Technical, 5. Experience, 3. Arithmetic, 2.	\$2,550
Sanitary Engineer, Department of Street Cleaning, Grade E	Between 26 and 30.	Required, thorough knowledge in sanitary engineering, relation of street cleaning and refuse collection to health, best methods of handling and disposal of refuse, organization and control of large groups of municipal employes, and the carrying out of large business undertakings. Candidates should have a general knowledge of laboratory investigation, of civil engineering relating to pavement construction, and mechanical engineering relating to the methods of handling refuse. They should also have broad general education, extensive reading and study, and travel and observation in this and other countries.	Technical, 5. Experience, 5.	\$5,000
Engineer Inspector, Civil, Grades C and D	Minimum age, 21.	Required, knowledge of the laws and ordinances governing the regulating, grading and paving of streets, building of vaults, removal of encumbrances, and making of sewer connections; should have experience as inspector, contractor, or employe on public work, and some knowledge of surveying for establishing grade.	Technical, 5. Experience, 3. Arithmetic, including surveying notes, 2.	\$1,200-1,800
Engineer Inspector, Architecture, Grades C and D	Minimum age, 20.	Required, 3 years' experience as architect, engineer, or inspector of buildings; credit given for technical graduation. Expected, an intimate knowledge of engineering fundamental of construction; the practice of the bureau of buildings; the structural requirements of the building code, calculations of loads on beams, columns and struts and ability to read plans.	Technical, 5. Experience, 3. Mathematics, 2.	\$1,200-1,800

## CHAPTER V

### THE STANDARDIZATION OF ENGINEERING EMPLOYMENTS IN THE PUBLIC SERVICE

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Until quite recently, the salaries of employes in the public service have been determined mainly in a haphazard manner. In many instances salaries have been fixed by accident, expediency or political preferment rather than by any consideration of the nature of the work performed or of the service rendered. This state of things has been unfortunate, to say the least. It has led to the squandering of money, to inefficiency of service, to dissatisfaction among the employes and, in many instances, to the breakdown of that *esprit de corps* so essential to the smooth running of a large organization.

#### *Objects of Standardization Movement*

Of late, there have been several attempts to sweep away these highly undesirable conditions, by an endeavor to standardize public employments. The standardization movement has as its primary objects the following:<sup>1</sup>

- a. The establishment of a basis for fixing salary rates in relation to work values through the introduction of standards which would correlate the fiscal problem of fixing rates or pay with the purely administrative problem of recruiting employes and regulating their advancement.
- b. The establishment of standard factors of education, experience and ability to govern each line and grade of work, subject to original appointment, which would prescribe in detail the conditions to be met by persons who wish to enter the service.
- c. The establishment of standard factors of service and ability to govern each line and grade of work, subject to promotional appointment, which would prescribe the conditions to be met by persons within the service who desire to pass from one grade to a higher grade.
- d. The establishment of standard titles and work requirements for each line and grade of work which would prescribe the conditions to be conformed to during employment.

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<sup>1</sup> MUNICIPAL RESEARCH No. 76, page 9.

- e. The improvement of governmental methods and technique through the making available of standardization materials for budget and other purposes.
- f. The establishment of a formal procedure which would currently inform the public and the employes of conditions governing entrance to the public service, advancement in the service and other employment practices.

As these matters are under discussion at present, and as they are likely to be acted upon in the near future, it has been deemed advisable to bring together such comparative data as bear on the problem in so far as engineers are concerned.

TABLE XXII contains<sup>1</sup> the standard specifications for engineering positions proposed by the Committee on Civil Service of the Senate of the State of New York transmitted to the Legislature, March 27, 1916.

TABLE XXIII contains<sup>2</sup> the standard specifications for engineering positions proposed by the Bureau of Standards of the Board of Estimate and Apportionment of the City of New York, June, 1916.

TABLE XXIV contains<sup>3</sup> comparative standardization data compiled from the standards proposed in the cities of Philadelphia, Boston, Cleveland, etc.

TABLE XXV,<sup>4</sup> which is inserted for purposes of comparison, contains certain salary data relating to minor positions from municipal pay-rolls in certain cities other than New York.

<sup>1</sup> First Report of the Committee on Civil Service of the Senate of the State of New York appointed to investigate the Civil Service of the State, with particular reference to salaries, grades and duties of officers and employes, transmitted to the legislature, March 27, 1916.

<sup>2</sup> Standard Specifications for Personal Service, prepared by The Bureau of Standards for the Board of Estimate and Apportionment of the City of New York, June, 1916.

<sup>3</sup> See Comparative Salary Data, Philadelphia Bureau of Municipal Research, March 1, 1916.

**TABLE XXII**  
**ENGINEERING SERVICE—STATE OF NEW YORK**  
*Comparative Classification of Employments—Present and Proposed*

PROPOSED CLASSIFICATION, BASED UPON DUTIES AND WORK REQUIREMENTS, WITH STANDARD TITLES AND RATES OF PAY					TITLES AND RATES OF EXISTING AUTHORIZED POSITIONS. (EXISTING TITLES AND RATES ARE SHOWN OPPOSITE PROPOSED GRADES IN WHICH THEY WERE CLASSIFIED AFTER APPRAISAL)	
GROUP	GRADE	TITLES AND DUTIES	COMPENSATION		TITLE	RATE
			RANGE	RATES		
107 Engineer	I	<b>Engineering Assistant</b>  Definition: The duties of incumbents of these positions are to perform, under instruction and supervision, elementary of apprentice work in field or office in one or more of the specialised engineering branches.	\$720-1,080	\$720	Assistant Engineer	\$ 720
				780	Assistant Engineer	1,500
				840	Assistant Engineer	2,100
				900	Axeman	700
				960	Axeman	720
				1,020	Axeman	750
				1,080	Axeman	780
					Axeman	900
					Chainman	750
					Chainman	780
					Chainman	900
					Engineering Draftsman	1,800
					Inspector of Construction	1,020
					Inspector of Construction	1,400
					Highway Inspector	1,080
					Junior Assistant Engineer	1,080
	Junior Bridge Draftsman	901				
	Junior Bridge Draftsman	1,000				
	Leveler	1,400				

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				Leveler	\$1,500
				Office Assistant	901
				Office Assistant	1,020
				Title-maker	1,800
				Tracer	900
				Tracer	1,000
				Tracer	1,200
				Rodman	900
				Rodman	1,050
				Rodman	1,200
II	Junior Assistant Engineer	\$1,200-1,800	\$1,200		
	Junior Assistant Civil Engineer		1,320		
	Junior Assistant Electrical Engineer		1,440		
	Junior Assistant Mechanical Engineer		1,560		
	Junior Assistant Sanitary Engineer		1,680		
			1,800		
	Definition:				
	The duties of incumbents of these positions are to assume responsibility for the execution of definite instructions in a minor section or division of an engineering project or activity in the field or office to direct, under supervision, the operation of minor engineering projects in the field or office; and to perform work of related character and standard.				
	Junior Assistant Engineer			Draftsman	1,200
				Draftsman	1,400
				Draftsman	1,500
				Draftsman	1,801

STANDARDIZATION OF ENGINEERING EMPLOYMENTS

TABLE XXII—Continued

PROPOSED CLASSIFICATION, BASED UPON DUTIES AND WORK REQUIREMENTS, WITH STANDARD TITLES AND RATES OF PAY				TITLES AND RATES OF EXISTING AUTHORIZED POSITIONS. (EXISTING TITLES AND RATES ARE SHOWN OPPOSITE PROPOSED GRADES IN WHICH THEY WERE CLASSIFIED AFTER APPRAISAL)			
GROUP	GRADE	TITLES AND DUTIES	COMPENSATION		TITLE	RATE	
			RANGE	RATES			
Engineer— Cont.	II	Junior Assistant Engineer—Cont.	\$1,200-1,800	\$1,200	Factory Inspector	\$1,300	
					Factory Inspector	1,500	
					Assistant Engineer	1,200	
					Assistant Engineer	1,500	
					Assistant Engineer	1,650	
					Assistant Engineer	1,800	
					Assistant Engineer	2,000	
					Assistant Engineer	2,100	
					Assistant Engineer	2,200	
					Bridge Draftsman	1,201	
					Chainman	720	
					Chainman	900	
					1,320	Draftsman	1,200
					1,440	Draftsman	1,500
					1,560	Draftsman	1,800
1,680	Engineering Draftsman	1,201					
1,800	Engineering Draftsman	1,340					
	Engineering Draftsman	1,500					

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Engineer Cont.	11	Junior Assistant Engineer—Cont.	Highway Inspector	1,060
			Highway Inspector	1,200
			Highway Inspector	1,400
			Inspector of Construction	1,060
			Inspector of Construction	1,400
			Inspector of Masonry	1,060
			Inspector of Masonry	1,400
			Instrument man	1,500
				1,080
			Junior Assistant Engineer	1,100
			Junior Assistant Engineer	1,200
			Junior Bridge Draftsman	1,350
			Leveler	1,440
			Leveler	1,500
			Leveler	2,000
			Leveler	1,080
			Office Assistant	1,050
			Rodman	1,080
			Rodman	1,200
			Rodman	1,800
			Structural Engineer	1,200
			Tracer	

STANDARDIZATION OF ENGINEERING EMPLOYMENTS

TABLE XXII—Continued

PROPOSED CLASSIFICATION, BASED UPON DUTIES AND WORK REQUIREMENTS, WITH STANDARD TITLES AND RATES OF PAY				TITLES AND RATES OF EXISTING AUTHORIZED POSITIONS. (EXISTING TITLES AND RATES ARE SHOWN OPPOSITE PROPOSED GRADES IN WHICH THEY WERE CLASSIFIED AFTER APPRAISAL)		
GROUP	GRADE	TITLES AND DUTIES	COMPENSATION		TITLE	RATE
			RANGE	RATES		
Engineer— Cont.	II	Junior Assistant Electrical Engineer			Electrical Engineer	\$1,800
					Electrical Inspector	2,400
					Lock Master	1,501
		Junior Assistant Mechanical Engineer			Bridge Designer	1,800
					Bridge Designer	2,100
					Bridge Designer	2,400
					Mechanical Draftsman	1,800
					Mechanical Engineer and Draftsman	2,400
		Junior Assistant Sanitary Engineer			Inspecting Engineer	1,500
	Sanitary Draftsman		1,800			
III	Assistant Engineer	\$1,980-2,580	\$1,980			
	Assistant Chemical Engineer		2,100			
	Assistant Civil Engineer		2,340			
	Assistant Electrical Engineer		2,580			
	Assistant Mechanical Engineer					
	Assistant Sanitary Engineer					

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Engineers Cont.	III	<p><b>Definition:</b> The duties of incumbents of these positions are to assume responsibility for the making of surveys, or the preparation of plans, designs, specifications and contracts for a minor section of a large engineering project, or the major section of a small engineering project; to supervise or inspect construction work of such project; to operate a completed section of such project; or to make investigations and reports upon engineering projects, as a basis for executive action.</p>	<p>Assistant Inspector Inspector Inspector of Equipment</p>	<p>\$1,800 2,200 2,500</p>
		<p>Assistant Engineer  Assistant Civil Engineer</p>	<p>Assistant Engineer Assistant Engineer Assistant Engineer Assistant Engineer Assistant Engineer Assistant Engineer of Claims Bridge Designer Civil Engineer of Grade Crosses Engineer of Claims Engineer of Claims Engineering Draftsman Engineering Draftsman Engineering Inspector</p>	<p>1,500 1,800 2,000 2,100 2,200 3,000 2,100 2,700 3,000 3,600 1,500 1,800 1,900</p>

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STANDARDIZATION OF ENGINEERING EMPLOYMENTS

TABLE XXII—Continued

PROPOSED CLASSIFICATION, BASED UPON DUTIES AND WORK REQUIREMENTS, WITH STANDARD TITLES AND RATES OF PAY				TITLES AND RATES OF EXISTING AUTHORIZED POSITIONS. (EXISTING TITLES AND RATES ARE SHOWN OPPOSITE PROPOSED GRADES IN WHICH THEY WERE CLASSIFIED AFTER APPRAISAL)		
GROUP	GRADE	TITLES AND DUTIES	COMPENSATION		TITLE	RATE
			RANGE	RATES		
Engineer— Cont.	III	Assistant Civil Engineer—Cont.			Engineering Inspector	\$2,500
					Principal Assistant Engineer	2,000
					Resident Engineer	2,400
					Resident Engineer	2,500
					Resident Engineer	2,700
					Resident Engineer	2,800
					Resident Engineer	3,000
					Tracer	1,200
					Assistant Electrical Engineer	1,800
					Assistant Mechanical Engineer	1,800
			Heating Engineer	1,800		
			Heating Engineer	1,900		
			Heating Engineer	2,500		
			Mechanical Engineer, Draftsman	2,400		
		Assistant Sanitary Engineer		Assistant Sanitary Engineer	2,000	
				Sanitary Engineer	2,150	
		Assistant Chemical Engineer		Gas Engineer	3,000	

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IV	Senior Assistant Engineer	\$2,820-3,540	\$2,820		
	Senior Assistant Chemical Engineer		3,060		
	Senior Assistant Civil Engineer		3,300		
	Senior Assistant Electrical Engineer		3,540		
	Senior Assistant Mechanical Engineer				
	Senior Assistant Sanitary Engineer				
	Definition:				
	The duties of incumbents of these positions are to supervise and assume complete responsibility for the work of a main division of a small organization, or a large subdivision of one of the main divisions of a large organization, involving surveying, designing or construction; or to maintain or operate a major section of a large engineering project; or to make independent investigations of and reports upon engineering projects, as a basis for executive action.				
IV	Senior Assistant Engineer			Chief Engineer \$3,000	
				Civil Engineer Expert in Building Construction 3,500	
				Fire Prevention Engineer 3,500	
				Inspector of Buildings 2,750	
				Inspector of Risks 4,000	
				Chemical Engineer 3,500	
				Gas Engineer 3,000	
		Senior Assistant Chemical Engineer			Assistant Engineer 1,800
		Senior Assistant Civil Engineer			Assistant Engineer 3,000

TABLE XXII—Continued

PROPOSED CLASSIFICATION, BASED UPON DUTIES AND WORK REQUIREMENTS, WITH STANDARD TITLES AND RATES OF PAY				TITLES AND RATES OF EXISTING AUTHORIZED POSITIONS. (EXISTING TITLES AND RATES ARE SHOWN OPPOSITE PROPOSED GRADES IN WHICH THEY WERE CLASSIFIED AFTER APPRAISAL)		
GROUP	GRADE	TITLES AND DUTIES	COMPENSATION		TITLE	RATE
			RANGE	RATES		
Engineer Cont.	IV	Senior Assistant Civil Engineer—Cont.			Assistant Engineer in Charge	\$2,100
					Assistant to Third Deputy	2,750
					Civil Engineer	3,000
					Confidential Inspector	3,000
					Division Engineer	4,000
					Factory Inspector	3,500
					Inspectors of Boilers and Engines	3,000
					Resident Engineer	2,400
					Resident Engineer	2,700
					Resident Engineer	3,000
					Resident Engineer	3,000
					Structural Engineer	2,800
					Telephone Engineer	2,800
		Senior Assistant Electrical Engineer		Assistant Engineer	3,000	
				Electrical Inspector	3,000	
		Senior Assistant Mechanical Engineer		Chief Engineer	2,400	
		Senior Assistant Sanitary Engineer		Principal Assistant Engineer	3,000	

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V	<p>Engineer</p> <p>Chemical Engineer</p> <p>Civil Engineer</p> <p>Electrical Engineer</p> <p>Mechanical Engineer</p> <p>Sanitary Engineer</p> <p>• Definition:</p> <p>• The duties of incumbents of these positions, which require a high degree of executive ability and specialized engineering technique, and which involve the making of decisions in administrative and engineering matters, subject to statutory limitation only, are to supervise and assume complete responsibility for the work of a small independent organization; or to supervise and assume complete responsibility for the work of a primary division of a large organization; or to make independent investigations of and reports upon engineering projects, as a basis for executive action.</p> <p>Engineer</p> <p>Chemical Engineer</p> <p>Civil Engineer</p>	<p>\$3,900,-5,400</p> <p>\$3,900</p> <p>4,200</p> <p>4,500</p> <p>4,800</p> <p>5,100</p> <p>5,400</p>	<p>Chief Engineer</p> <p>Chief Inspector</p> <p>Special Deputy State Engineer</p> <p>Chief Clerk</p> <p>Chief Engineer</p>	<p>\$3,500</p> <p>5,000</p> <p>6,000</p> <p>4,200</p> <p>4,500</p>
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TABLE XXII—*Concluded*

PROPOSED CLASSIFICATION, BASED UPON DUTIES AND WORK REQUIREMENTS, WITH STANDARD TITLES AND RATES OF PAY				TITLES AND RATES OF EXISTING AUTHORIZED POSITIONS. (EXISTING TITLES AND RATES ARE SHOWN OPPOSITE PROPOSED GRADES IN WHICH THEY WERE CLASSIFIED AFTER APPRAISAL)		
GROUP	GRADE	TITLES AND DUTIES	COMPENSATION		TITLE	RATE
			RANGE	RATES		
OFI	V	Civil Engineer— <i>Cont.</i>			Chief Engineer	\$5,000
					Chief Engineer	5,100
					Division Engineer	2,200
					Division Engineer	4,800
					Engineer of Grade Crossings	4,500
					First Deputy Engineer	6,000
					First Assistant Deputy Engineer	5,000
					Second Deputy Engineer	5,000
					Third Deputy Engineer	5,000
	Chief Division Steam Railroads	4,500				
		Electrical Engineer			Chief Inspector	5,000
		Mechanical Engineer				
		Sanitary Engineer			Chief Engineer	4,500
	VI	Chief Engineer Consulting Engineer Supervising Engineer	\$5,700-up	\$5700-up		

TITLES AND RATES OF EXISTING AUTHORIZED POSITIONS



	<p><b>Definition:</b>  The duties of incumbents of these positions, which require the highest order of executive or advisory ability, and which involve the making of final decisions in administrative and engineering matters, subject to statutory limitation only, are to supervise and assume complete responsibility for all the engineering work of a large independent organization; or to supervise the construction of engineering projects or works of great magnitude and complexity; or to give independent expert or critical engineering advice of the highest order, as a basis for executive action relative to work of this scope.</p> <p>Chief Engineer  Consulting Engineer  Supervising Engineer</p>			<p>Chief Engineer  Expert in Electrical Design</p>	<p>\$20,000  20. p. d.</p>
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THE ENGINEER IN PUBLIC SERVICE

TABLE XXIII  
DIGEST OF PROPOSED SPECIFICATIONS—ENGINEERING SERVICE  
—NEW YORK CITY

DIGEST OF STANDARD SPECIFICATIONS					
GROUP	GRADE	TITLE	SALARY RANGE	RATES	
Engineer	1	Engineering Assistant	\$900-1,380	\$900	
				1,020	
				1,140	
				1,260	
				1,380	
	2	Junior Engineer	1,500-2,100	1,500	
				Junior Engineer (Civil)	1,620
				Junior Engineer (Mechanical)	1,740
				Junior Engineer (Electrical)	1,920
				Junior Engineer (Sanitary)	2,100
	3	Assistant Engineer	2,280-3,180	2,280	
				Assistant Engineer (Civil)	2,460
				Assistant Engineer (Mechanical)	2,700
				Assistant Engineer (Electrical)	2,940
				Assistant Engineer (Sanitary)	3,180
	4	Senior Assistant Engineer	3,420-4,560	3,420	
				Senior Assistant Engineer (Civil)	3,660
				Senior Assistant Engineer (Mechanical)	3,960
				Senior Assistant Engineer (Electrical)	4,260
				Senior Assistant Engineer (Sanitary)	
	5	Engineer	4,860-6,600	4,860	
				Engineer (Civil)	5,280
				Engineer (Mechanical)	5,700
Engineer (Electrical)				6,120	
Engineer (Sanitary)				6,600	
6	Chief Engineer Consulting Engineer	7,200 and up (No recommendation above \$9,000) Per diem: \$25 and up	7,200		
			7,800		
			8,400		
			9,000		

TABLE XXIV  
COMPARATIVE STANDARDIZATION DATA

NEW YORK		CHICAGO		PITTSBURGH		ST. PAUL		PORTLAND		OAKLAND		HOUSTON	
Time Req. At Prev. Rate	Rates	Time Req. At Prev. Rate	Rates	Time Req. At Prev. Rate	Rates	Time Req. At Prev. Rate	Rates	Time Req. At Prev. Rate	Rates	Time Req. At Prev. Rate	Rates	Time Req. At Prev. Rate	Rates
TECHNICAL ENGINEERING SERVICE													
CHAIRMAN, RODMAN, TRANSITMAN, SURVEYOR													
Junior Instrumentman		Chairman		Chairman		Chairman Rodman		Rodman's Chairman		Chairman		Chairman Rodman	
1	\$900	1	\$840	1	\$600	1	\$900	6m	\$780	1	\$900	1	\$730
1	900	1	960	1	730	6m	600	6m	840	1	950	1	840
1	1,030	1	Rodman	1	730	1	730	6m	900	1	1,080	6m	900
1	1,080	1	1,080	1	Rodman	1	—	6m	950	1	—	1	—
1	1,140	1	1,200	1	840	1	—	1	1,030	1	—	1	—
1	1,300	1	1,330	1	900	1	—	—	—	1	—	1	—
Instrumentman		—		Transitman		Leveler		Instrumentman		Instrumentman		Instrumentman Levelman	
—	\$1,330	—	—	—	\$1,080	—	\$900	—	\$1,200	—	\$1,330	—	\$900
—	1,440	—	—	2	1,300	6m	900	6m	1,330	1	1,330	1	1,020
—	1,500	—	—	2	1,330	1	1,030	6m	1,330	1	1,500	6m	1,080
—	1,680	—	—	2	1,380	—	—	1	1,500	—	—	—	—
—	1,900	—	—	—	—	—	—	1	—	—	—	—	—

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						Tramman		Head Surveyor				Assistant City Surveyor	
—	—	—	—	—	—	6m	\$1,080	—	\$1,800	—	—	—	\$1,140
—	—	—	—	—	—	1	1,140	6m	1,800	—	—	1	1,200
—	—	—	—	—	—	1	1,200	6m	1,920	—	—	6m	1,320
—	—	—	—	—	—	—	—	6m	1,980	—	—	—	—
—	—	—	—	—	—	—	—	1	2,100	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	City Surveyor	1,600
<b>DRAFTSMAN</b>													
Junior Draftsman		Tracer		Junior Draftsman		Tracer		Junior Draftsman		Assistant Draftsman		Junior Draftsman	
—	\$900	—	\$940	—	\$780	—	\$720	—	\$780	—	\$720	—	\$900
1	900	1	900	1	840	6m	780	6m	840	1	780	1	1,020
1	1,020	—	—	1	900	1	840	6m	900	1	840	6m	1,080
1	1,080	—	—	1	960	1	900	6m	960	—	—	—	—
1	1,140	—	—	—	—	—	—	1	1,020	—	—	—	—
1	1,200	—	—	—	—	—	—	2	1,200	—	—	—	—
Draftsman		Assistant Architectural Draftsman, Mechanical Draftsman, Map Draftsman		Draftsman		Junior Architectural Draftsman		Senior Draftsman		Draftsman		Senior Draftsman	
—	\$1,320	—	\$1,080	—	\$1,020	—	\$1,020	—	\$1,200	—	\$1,320	—	\$1,140
—	1,440	1	1,200	1	1,080	6m	1,080	6m	1,220	1	1,380	1	1,200
—	1,560	1	1,320	1	1,140	1	1,140	6m	1,280	1	1,500	6m	1,320
—	1,680	—	—	1	1,200	1	1,200	1	1,500	—	—	—	—
—	1,800	—	—	—	—	1	1,320	—	—	—	—	—	—

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<sup>1</sup> Rodman not over \$900.  
<sup>2</sup> Special rate for unusually important duties.

TABLE XXIV—Continued

NEW YORK		CHICAGO		PITTSBURGH		ST. PAUL		PORTLAND		OAKLAND		HOUSTON	
Time Req. At Prev. Rate	Rates	Time Req. At Prev. Rate	Rates	Time Req. At Prev. Rate	Rates	Time Req. At Prev. Rate	Rates	Time Req. At Prev. Rate	Rates	Time Req. At Prev. Rate	Rates	Time Req. At Prev. Rate	Rates
TECHNICAL ENGINEERING SERVICE (Cont'd)													
		Architectural Draftsman, Bridge Designing Draftsman, Engineering Draftsman		Engineering Draftsman		Civil Engineering Draftsman		Head Draftsman Computer					
—	—	1	\$1,500	—	\$1,080	—	\$1,200	—	\$1,800	—	—	—	—
—	—	1	1,020	—	1,200	6m	1,320	6m	1,800	—	—	—	—
—	—	2	1,740	—	1,390	1	1,440	6m	1,920	—	—	—	—
—	—	—	—	—	—	—	1,500	6m	1,980	—	—	—	—
		Architectural Designer Chief Draftsman				Architectural Draftsman							
—	—	—	\$1,020	—	—	—	\$1,140	—	—	—	—	—	—
—	—	1	2,160	—	—	6m	1,560	—	—	—	—	—	—
—	—	2	2,400	—	—	1	1,680	—	—	—	—	—	—
—	—	—	—	—	—	—	1,800	—	—	—	—	—	—

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ENGINEER Engineering Assistant		Junior Engineer		Assistant Engineer		Junior Civil Engineer		Municipal Engineer		Junior Engineer		Assistant Engineer	
—	\$900	—	\$1,500	—	\$1,500	—	\$900	—	\$1,200	—	\$1,620	—	\$1,140
1	1,020	1	1,620	2	1,680	6m	900	6m	1,320	1	1,800	1	1,200
1	1,140	2	1,740	2	1,890	1	1,020	6m	1,380	1	1,920	6m	1,320
—	—	—	—	2	2,040	—	—	1	1,500	—	—	—	—
—	—	—	—	2	2,400	—	—	1	1,620	—	—	—	—
—	—	—	—	—	—	—	—	1	1,740	—	—	—	—
Junior Engineer		Assistant Engineer		Division Engineer		Ass't Civil Engineer		Assistant Engineer		Assistant Engineer		Bridge Designing Engineer	
—	\$1,200	—	\$1,920	—	\$2,700	—	\$1,200	—	\$1,800	—	\$1,980	—	\$1,620
—	1,390	1	2,160	2	2,000	6m	1,320	6m	1,860	1	2,160	—	—
—	1,560	2	2,400	2	2,300	1	1,440	6m	1,920	1	2,400	—	—
—	1,620	—	—	2	2,600	1	1,500	6m	1,980	—	—	—	—
—	1,740	—	—	—	—	—	—	1	2,100	—	—	—	—
—	1,920	—	—	—	—	—	—	2	2,280	—	—	—	—
—	2,100	—	—	—	—	—	—	—	—	—	—	—	—
Assistant Engineer		Engineer		Managing Engineer		Prin. Ass't Civil Eng'r		Prin. Ass't City Eng'r		Dep. City Engineer		Ass't City Engineer	
—	\$2,280	—	\$2,700 and above	—	\$4,000	—	\$1,800 and above	—	\$2,400	—	\$3,000 and above	—	\$2,700
—	2,490	—	—	—	4,500	—	—	1	2,520	—	—	—	—
—	2,700	—	—	—	5,000	—	—	1	2,640	—	—	—	—
—	2,940	—	—	—	—	—	—	1	2,880	—	—	—	—
—	3,180	—	—	—	—	—	—	1	3,120	—	—	—	—
—	—	—	—	—	—	—	—	1	3,360	—	—	—	—
—	—	—	—	—	—	—	—	2	3,600	—	—	—	—

TABLE XXIV—Concluded

NEW YORK		CHICAGO		PITTSBURGH		ST. PAUL		PORTLAND		OAKLAND		HOUSTON	
Time Req. At Prev. Rate	Rates	Time Req. At Prev. Rate	Rates	Time Req. At Prev. Rate	Rates	Time Req. At Prev. Rate	Rates	Time Req. At Prev. Rate	Rates	Time Req. At Prev. Rate	Rates	Time Req. At Prev. Rate	Rates
TECHNICAL ENGINEERING SERVICE (Contd)													
Senior Assistant Engineer		City Engineer											
—	\$3,430	—	\$4,020 and above	—	—	—	—	—	—	—	—	—	—
—	3,000	—	—	—	—	—	—	—	—	—	—	—	—
—	4,300	—	—	—	—	—	—	—	—	—	—	—	—
—	4,500	—	—	—	—	—	—	—	—	—	—	—	—
Engineer													
—	\$4,800	—	—	—	—	—	—	—	—	—	—	—	—
—	5,200	—	—	—	—	—	—	—	—	—	—	—	—
—	5,700	—	—	—	—	—	—	—	—	—	—	—	—
—	6,120	—	—	—	—	—	—	—	—	—	—	—	—
Chief Engineer													
—	\$6,130	—	—	—	—	—	—	—	—	—	—	—	—
—	6,000	—	—	—	—	—	—	—	—	—	—	—	—
—	7,300 and up	—	—	—	—	—	—	—	—	—	—	—	—

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**TABLE XXV**  
**COMPARATIVE SALARY DATA RELATING TO MINOR POSITIONS FROM A NUMBER OF MUNICIPAL PAY-ROLLS**  
**OTHER THAN IN NEW YORK CITY**

SERVICE, POSITION AND CITY	MIN. RATES		MOST FREQUENT INTERMEDIATE RATES						MAX. RATES		TOTAL NO. AT GIVEN RATES	NO. AT RATES NOT GIVEN
	No.	Rate	No.	Rate	No.	Rate	No.	Rate	No.	Rate		
<i>Technical Engineering Service</i>												
<i>CHAIRMAN</i>												
Philadelphia	16	\$500	—	—	—	—	—	—	10	\$720	26	0
Cleveland	—	840	—	\$600	—	\$660	—	—	—	720	—	0
Pittsburgh	43	720	—	—	—	—	—	—	43	720	43	0
Los Angeles	6	780	—	—	—	—	—	—	30	840	36	0
<i>DRAFTSMAN</i>												
Philadelphia	5	800	25	1,000	47	1,200	16	1,800	1	2,700	94	50
Boston	1	2,500	1	1,140	3	1,300	1	1,425	2	1,500	8	2
Cleveland	—	840	—	960	3	1,200	—	—	1	1,500	—	—
Baltimore	1	800	13	900	10	1,000	12	1,200	1	1,500	37	8
Pittsburgh	1	1,000	5	1,200	17	1,380	15	1,500	1	2,000	37	2
Detroit	1	1,100	3	1,200	1	1,300	—	—	2	1,500	7	0
Buffalo	2	1,400	—	—	—	—	—	—	2	1,400	2	0
San Francisco	4	1,600	3	1,620	3	1,800	1	2,100	1	3,000	12	2
Milwaukee	2	780	—	840	—	900	—	1,000	1	2,400	—	0
Cincinnati	4	900	4	1,080	2	1,140	10	1,200	2	1,440	22	0
Los Angeles	5	938	28	1,248	20	1,404	13	1,560	1	2,340	67	13
Minneapolis	1	1,020	—	—	—	—	—	—	1	1,060	2	0
<i>DRAFTSMAN, ARCHITECTURAL</i>												
Philadelphia	1	1,200	1	1,500	—	—	—	—	1	2,190	3	0
Boston	1	1,710	—	—	—	—	—	—	1	1,710	1	0
Cleveland	2	1,200	—	—	—	—	—	—	2	1,200	2	0
Pittsburgh	1	1,080	—	—	—	—	—	—	1	1,080	1	0
Buffalo	3	1,200	—	—	—	—	—	—	3	1,200	3	0

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STANDARDIZATION OF ENGINEERING EMPLOYMENTS

<b>RODMAN</b>													
	Philadelphia	24	800	—	—	—	—	—	—	10	960	44	0
	Boston	2	1,500	2	2,000	2	2,500	—	—	21	900	27	0
	Cleveland	—	720	5	780	—	—	—	—	1	900	—	0
	Baltimore	2	600	10	720	8	780	—	—	21	900	41	0
	Pittsburgh	27	840	—	—	—	—	—	—	1	900	28	0
	Detroit	1	1,000	—	—	—	—	—	—	4	1,100	5	0
	Buffalo	12	1,000	—	—	—	—	—	—	12	1,000	12	0
	Milwaukee	4	660	—	—	—	—	—	—	4	660	4	0
	Cincinnati	17	600	1	660	10	720	—	—	5	840	33	0
	Birmingham	10	480	—	—	—	—	—	—	2	540	12	0
<b>SURVEYOR</b>													
	Philadelphia	19	1,000	12	1,200	21	1,400	10	2,000	13	4,000	75	7
	Baltimore <sup>1</sup>	1	3,000	—	—	—	—	—	—	1	3,000	1	0
	San Francisco	17	1,200	5	1,320	6	1,500	7	1,800	2	2,100	37	0
	Los Angeles	1	1,248	6	1,404	5	1,560	—	—	6	1,716	18	0
101	<b>TRACER</b>												
	Philadelphia	4	600	—	—	—	—	—	—	4	600	4	0
	Cleveland	1	480	—	—	—	—	—	—	1	480	1	0
<b>TRANSITMAN</b>													
	Philadelphia	23	900	—	—	—	—	—	—	5	1,500	38	0
	Boston	1	900	5	1,100	5	1,140	12	1,300	1	1,330	24	9
	Cleveland	—	900	—	996	2	1,100	3	1,200	—	1,380	—	1
	Baltimore	—	780	—	—	—	—	—	—	—	900	—	0
	Pittsburgh	1	1,080	—	—	—	—	—	—	23	1,200	24	0
	Detroit	4	1,200	—	—	—	—	—	—	2	1,400	6	0
	Buffalo	1	1,200	2	1,254.17	1	1,308.33	—	—	5	1,400	9	0
	Milwaukee <sup>2</sup>	1	900	—	—	—	—	—	—	1	900	1	0
	Cincinnati <sup>2</sup>	1	900	8	960	4	1,080	1	1,199	1	1,320	15	0
	Los Angeles <sup>2</sup>	5	1,092	15	1,176	—	—	—	—	1	1,200	21	0
	Minneapolis	1	1,170	—	—	—	—	—	—	1	1,170	1	0

<sup>1</sup> City Surveyor.

<sup>2</sup> Instrumentman.

## CHAPTER VI

### SUMMARY AND CONCLUSIONS

Having the facts before us, we are in a position to summarize and to draw conclusions.

If we combine the numbers of engineers employed by the United States government, the government of New York State and the government of New York City, we find that there are 6,498 positions of an engineering nature in these three divisions of the public service which may be regarded as attractive to the engineering graduate. From the viewpoint of compensation these are distributed as follows:

SALARY	NUMBER OF ENGINEERING POSITIONS				PER CENT
	FEDERAL	N. Y. STATE	N. Y. CITY	TOTAL	
\$900-\$1,000	185	72	714	971	14.9
1,000-1,500	970	594	1,060	2,624	40.4
1,501-2,000	505	177	814	1,496	23.0
2,001-2,500	347	162	310	819	12.6
2,501-3,000	136	41	110	287	4.4
3,001-3,500	26	6	41	73	1.1
3,501-4,000	59	10	53	122	1.9
Above 4,000	25	11	70	106	1.6
<b>TOTAL</b>	<b>2,253</b>	<b>1,073</b>	<b>3,172</b>	<b>6,498</b>	<b>100.0</b>

#### *Test of "Successful" Engineer Applied to Public Service*

If we adopt \$3,000 or over per annum as a fair measure of the "successful" engineer we find the following:

SALARY	NUMBER	PER CENT
Below \$3,000	6,030	92.8
\$3,000 or over	468	7.2
<b>TOTAL</b>	<b>6,498</b>	<b>100.0</b>

SUMMARY AND CONCLUSIONS

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The total numbers of employes in the branches of the public service which we have just considered, are, in round numbers:

United States.....	480,000
New York State (excluding Public Service Commission, 1st District).....	18,000
New York City (including Public Service Commission, 1st District).....	85,000
Total .....	583,000

Of these totals, the engineers constitute 0.47 per cent for the United States, 6.00 per cent for New York State, and 3.73 per cent for New York City. Of the total number in the three services (583,000), the engineers (6,498 in number) constitute 1.11 per cent.

Mr. J. L. Jacobs<sup>1</sup> has recently estimated that the total number of civil employes in the United States (including the federal government, states and cities) is 1,800,000 to 2,000,000. If the average just stated is roughly indicative of the general proportion of engineers in all services, there are in the neighborhood of 20,000 to 25,000 engineers who are employed in public service in the whole United States.<sup>2</sup> If we add to these, those who are dependent on them, we find that the part of our population directly involved in the subject matter of this publication is about 100,000, counting four to a family.

In Chapter I, we pictured the young engineering graduate as being in a questioning mood with regard to the usual prospects of his profession and its compensation and rewards. To these questions others were added: "Is there a career in the public service? What are the relative advantages and disadvantages? Is public service in engineering a useful stepping stone?" And so on.

The facts before us should aid us in answering such questions.

#### *Security of Tenure an Advantage in Public Service*

In the first place, we may count security as one of the most obvious of the advantages. The engineer is proverbially a "job chaser." The special Committee of the American Society of Civil Engineers "to investigate the conditions of employment of and compensation of civil engineers" has set as one of its tasks,

<sup>1</sup>"Public Service Opportunity and Preparedness," *Journal of the Western Society of Engineers*, Vol. XXI, No. 6, June, 1916.

<sup>2</sup>See appendix B for a complete list of Civil Service Commissions in the United States.

"to secure information indicating the proportion of time when engineers are out of employment." Ernest McCullough<sup>1</sup> says on this point:

"The average engineer is known as a 'job chaser.' Not only in vacation time must the engineering student hunt jobs, but periodically after graduation the same experience must be gone through. The majority of engineers work on salary, the terms of employment are uncertain and in slack times thousands of men are turned adrift." And again<sup>2</sup> "The chances for continuous employment are very slim. Many engineers never acquire a competency; the periods of non-employment often last long enough to get a man in debt. Once in debt his case is almost hopeless. He works for a salary when he works at all, and there is small opportunity to recoup losses, for the salaries are just large enough to live on. This recurrence of idle periods when the treasury is empty is the cause of most of the poverty and distress in the world. In this the educated man has no advantage over the laboring man. He is, in fact, worse off than the laborer, for he cannot descend to the doing of manual work without losing caste and being looked upon by his relatives as a failure. Men hold on, year after year, at first because to try to secure other work would be deemed a tacit confession of failure, and this would be damning, as in the popular mind engineering is the best paid business in the world; finally the disheartened man is compelled to hang to the one thing he understands best, because he reaches an age when a man finds it practically impossible to make a start without capital in some other line of work. If he were a merchant, whose sole business is to buy and sell, it would make little difference what he should finally buy and sell, but to leave a profession means to go into some line of work entirely foreign to all previous experience, and the throwing away of all the experience thus far gained.

"After a number of years prospective employers begin to turn a man down because he has worked in too many places. It is a source of keen humiliation to many high-minded men that they have changed often and have not succeeded in getting a permanent footing, but they are in this predicament through no fault of their own. The engineering graduate, who is turned loose in the world during a period of business depression, such as is experienced in the United States at intervals of about ten years, seldom, if ever,

<sup>1</sup>*Loc. cit.*, p. 112.

<sup>2</sup>*Loc. cit.*, p. 137.

gets solidly on his feet. He is a wanderer from job to job to the end of the chapter, he he the most capable man in the world and a worshipper of his calling. He further experiences poignant suffering in seeing class after class of young men graduate years later than he and step into good positions just because they happened to graduate in years when men were in demand and young fellows start at almost any pay they can get. This cruel condition is understood by some employers, but the majority give it no thought and are disposed to blame a man who changes positions often."

As contrasted with this depressing picture, public service offers the one great advantage of security. Permanency of tenure is usually assured. On the other hand this very security may become a disadvantage. Security is apt to breed indolence. Many a good man has degenerated into a mere job holder in public service, who, if he had had the spur of necessity to urge him on, would have been more successful.

#### *Success not a Matter of Dollars Alone*

This whole question of "success" ought to be gone into more thoroughly than the limits of this volume will permit. What is a "success"? Obviously, it cannot be measured in dollars and cents alone. The firm assurance that one's work is worth while is a form of success that is real though it wears few outward signs. Love of the public service and progress in it are not to be overlooked. The opportunity to advance science by ever so little is not to be despised. Public recognition—even though slight—for services rendered is gratifying, and when well earned is a source of genuine pleasure. The names of engineers, chemists, geologists, and other men of science who have served their country are written firmly in the pages of our history. These men may not be among the heroes of the street, but time cannot efface their records. There are soldiers of the level and the rod, the test tube, and the pick, and they are not without honor and reward.

#### *Public Service a Good Stepping Stone.*

There are other more material advantages to be considered. The lower grades of engineering work are unquestionably better paid in government service than in private practice. Furthermore compensation conditions are improving. A comparison

of the rates of pay given in the foregoing chapters with those which existed ten years ago<sup>1</sup> will make this apparent.

If it is true that the salaries in government service are rather better, on the average, in the beginning, it is equally true, on the other hand, that they are poorer later on. This is shown by Fig. 2, Chapter I, page 8. The numbers of high-paying positions in government service are few. As has been stated above only 7.2 per cent of the engineering positions in the services of the federal government, New York State and New York City pay \$3,000 or over. There is but one interpretation possible. Taking it all in all, *public service in engineering is a good stepping stone but a poor career.* We believe that most engineers are agreed on this point.

#### *Government Requires Increasing Number of Technical Men*

There is another thing which ought to be considered. President Wilson recently called attention to the fact that the dominating problems of our early history were of a legal nature. In consequence we find the lawyer omnipresent in government. But it is equally true, as the President also points out, that the governmental problems of the present are those which are calling more and more for men of other vocations. For the solution of these problems, the engineer is singularly well fitted.

A comparison of the governmental budgets of late years with those of some time ago will show that the newer functions of government call, more and more, for technically trained men. Water systems, the control of gas and electricity, sanitation, public health, street cleaning, bridges, canals, docks, ferries, the control of railroads, reclamation, the mobilization of natural and social forces,—all these involve problems of an engineering nature.

The day has long passed since the lawyer, the physician and the clergyman were regarded as the only educated men of the community. The technical man has taken his place beside them. As the years go on, the technical man will be needed in government service to a far greater extent than is the case even at present. J. L. Jacobs<sup>2</sup> is unquestionably correct in his statement that "engineers, because of their analytical training, their ability to obtain and stick to facts and to act with precision, their imagi-

<sup>1</sup>See Census Bulletin No. 94 "Statistics of Employes, Executive Civil Service of the United States, 1907."

<sup>2</sup>"Public Service Opportunity and Preparedness," *Journal of the Western Society of Engineers*, Vol. XXI, No. 6, June, 1916.

nation and vision for new and big things and their genuine interest and spirit of public service, have in the public service almost a virgin field."

*Many New Vocations Open to Engineers*

One final word of a somewhat general nature.

From the records of 22,967 engineering graduates, it has been found that 90.1 per cent of them remain in the technical practice of their profession.<sup>1</sup> On the other hand, the 6th Annual Report of the Carnegie Foundation for the Advancement of Teaching (page 86) states that "the great number of engineering schools now in existence will probably furnish a larger number of engineers than the country can take up. In fact, on account of this pressure, *many engineering graduates are today seeking other vocations than the engineering for which they have been prepared.*"<sup>2</sup>

Evidences of this are to be seen on every hand. The new profession of city manager is almost monopolized by engineers. Another sign of the trend of near-future events is seen in the recent request made by the President of the United States that the four national engineering societies—Civil, Electrical, Mechanical and Mining—in co-operation with the closely related American Chemical Society,<sup>3</sup> make an inventory of the country's manufacturing and industrial resources.

This country is about to go through a second period of reconstruction. Though we have not thus far been in arms in the present war, our economic interests have been so directly involved, that considerable readjustment will be needed at its close. The new conditions which will prevail in Europe will also add to our difficulties. In enabling us to adapt ourselves to this reconstruction period, the engineer will be needed more than any other man.

Then, too, there is the field of unofficial public service which is just opening up—bureaus of municipal research, chambers of commerce, survey committees of all sorts. Conservation, scientific management, administrative efficiency, business systems and the cognate problems which are engrossing the attention of men of the present day are, in their essence, of an engineering nature. A man with a good fundamental training as an engineer

<sup>1</sup> A. A. Potter and R. Bowerman, *Engineering Education*, Vol. VI, p. 776.

<sup>2</sup> Italics ours.

<sup>3</sup> The combined membership of these societies is now about 30,000.



can enter upon these fields better equipped than the member of any other profession.

As Prof. C. R. Mann<sup>1</sup> has pointed out—"Relatively little attention has as yet been given to the scientific study of problems of the organization and control of the forces of men. These problems of human machine design and the conservation of human resources are as much engineering problems as are those of mechanism and the conservation of material resources. The demand for creative work in this field of human engineering is daily becoming more insistent. Can the engineering schools longer afford to ignore it?"

#### *Schools Must Adapt Courses to Present Conditions*

Professor Mann's last sentence brings us to our final point. The engineering schools—all schools, in fact—not only cannot afford to ignore the insistent demands of the present day but they must—*must* is the exact word for it—adapt themselves to them. Men *must* be trained for the life which will confront them when they leave school. And this training *must* extend through every department of our educational system from the elementary school through the high school, the college, and the technical school or university.

The one great failure of our present educational system is that it throws men and women into callings wholly irrespective of their natural aptitudes and capabilities. How many students in our engineering schools have taken an account of themselves along the lines of the questionnaire of Professor Mann quoted in Chapter I (see page 1) to find out whether they are actually fitted for the life-work for which they are preparing? How accurate a picture of that life have they? What guidance have they received? A life career cannot be built on nebulous and enthusiastic generalities. Definiteness and concreteness are absolutely essential.

Of the larger aspects of the questions just put, this study cannot treat. It does attempt, however, to present a survey—the first of a series, it is hoped,—of one corner of the field of public service.

<sup>1</sup>"Report of Progress in the Study of Engineering Education." *Bulletin of the Society for the Promotion of Engineering Education*, Vol. VII, 1916.

**APPENDICES**

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- A—LIST OF OFFICIAL REGISTERS AND DIRECTORIES PUBLISHED BY U. S. GOVERNMENT**
- B—LIST OF CIVIL SERVICE COMMISSIONS IN THE UNITED STATES**
- C—INFORMATION FOR THOSE SEEKING TO ENTER THE PUBLIC SERVICE**

## APPENDIX A

### LIST OF OFFICIAL REGISTERS AND DIRECTORIES PUBLISHED BY THE UNITED STATES GOVERNMENT.

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- Official Register of the United States (Blue Book), issued every two years, last edition 1915.
- Directory of the Department of State, issued annually, last edition 1915.
- Register of the Department of Justice, issued annually, last edition 1916.
- List of United States Judges, Attorneys, and Marshals, issued yearly by the Department of Justice, last edition 1916.
- Official Congressional Directory, issued at each session of Congress, last edition 64th Congress, 1st session.
- Biographical Congressional Directory, with outline history of national Congress, 1774-1911; Continental Congress, Sept. 5, 1774-Oct. 21, 1788, and U. S. Congress from 1st to 62nd Congress, Mar. 4, 1789 to Mar. 3, 1911.
- Directory of the United States Senate, issued for the use of Senators and attachés of the Senate, irregular edition, last received January 20, 1916.
- Congressional Vest Pocket Directory, issued at each session of Congress for the use of Members and attachés of the House of Representatives, last edition received 64th Congress, 1st session.
- Roster Showing Stations and Duties of Officers of the Quartermaster's Department, Army, issued monthly by the Quartermaster's Department, War Department.
- Statement Showing Rank, Duties, and Addresses of Officers of Corps of Engineers, Army, issued quarterly by Office of Chief of Engineers, War Department.
- Complete List of Veterinarians and Official Meat Inspectors, issued by Chemistry Bureau.
- Roster of Officers and Troops, U. S. Military Academy, West Point, N. Y., issued yearly by the War Department.
- Official Register of Officers and Cadets of the U. S. Military Academy, West Point, N. Y., issued yearly by the Military Academy, last edition 1915.
- Register of Commissioned and Warrant Officers of Navy and Marine Corps, issued yearly, last edition 1916.
- Navy and Marine Corps List and Directory, issued monthly.
- Army Register, published annually, last edition 1916.
- The Army List and Directory, issued monthly.
- Historical Register and Dictionary of Army, Sept. 29, 1789, to Mar. 2, 1903, by Francis B. Heitman, issued by the War Department, two volumes. A new edition, bringing the subject up to date, is in preparation.

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- Historical Register of Officers of Continental Army during the War of Revolution, April, 1775–December, 1783, published privately by Francis B. Heitman. It may be secured at the Rare Book Shop, 813 17th St., N. W., Washington, D. C.
- Register of Officers, Vessels, and Stations of the United States Coast Guard, issued yearly, last edition 1916.
- Official List of Commissioned and Other Officers of the Public Health Service, also list of U. S. Marine Hospitals, Quarantine Stations and Quarantine Vessels, last edition 1916. †
- List of Officers of Merchant, Steam, Motor, and Sail Vessels Licensed During the Year, issued by the Steamboat Inspection Service annually, last edition 1915.
- Roster of Registered Attorneys entitled to Practice before Patent Office, distributed by the Commissioner of Patents.
- Roster of Commissioned Officials and Employees of the U. S. Weather Bureau, formerly published yearly. Discontinued in 1910.
- Directory of Officials of Alaska, in Report of the Governor of Alaska, 1912, appendix B.
- List of Members of the Bureau of Mines, April 1, 1916.
- Educational Directory, published yearly as a bulletin by the Bureau of Education; last edition covers 1915–1916.
- Directories of the Bureau of Animal Industry, issued quarterly by the Bureau.
- Officials Charged with Enforcement of Food Laws in the United States and Canada, issued by the Chemistry Bureau, Department of Agriculture, last edition July 1, 1912. This list is now contained in the Service and Regulatory Announcements of the Chemistry Bureau.
- Meat Inspection Directory, by numbers and stations, and address list of Inspectors and others, issued by the Bureau of Animal Industry.
- Diplomatic and Consular Service of the United States—Aver. 5 editions.
- Diplomatic List—Monthly.
- Register of Officers and Vessels of the Revenue Cutter Service, Annual.
- Official Register of the U. S. Life Saving Service, Annual.
- Roster showing Stations and Duties of Officers of the Quartermaster's Department, Monthly.
- Annual Register of the U. S. Naval Academy.
- Directory of Employees of the Government Printing Office, Monthly.

## APPENDIX B

### LIST OF CIVIL SERVICE COMMISSIONS IN THE UNITED STATES

On March 1, 1916, the following Civil Service Commissions were in existence in the United States:

<b>UNITED STATES</b>	Des Moines
United States Civil Service Commission, Washington, D. C.	Dubuque
<b>ARKANSAS</b>	Koekuk
Fort Smith	Sioux City
<b>CALIFORNIA</b>	Waterloo
State Commission, Sacramento	<b>KANSAS</b>
Long Beach	State Commission, Topeka
Los Angeles City	Anthony
Los Angeles County	Coffeyville
Oakland	Hutchinson
Sacramento	Independence
San Diego	Kansas City
San Francisco	Leavenworth
Stockton	Parsons
<b>COLORADO</b>	Topeka
State Commission, Denver	Wichita
Colorado Springs	<b>KENTUCKY</b>
Denver	Newport
Grand Junction	<b>LOUISIANA</b>
Fueblo	Bogalusa
<b>CONNECTICUT</b>	New Orleans
State Commission, Hartford	<b>MASSACHUSETTS</b>
Derby	State Commission, Boston
New Haven	No Local Commissions
<b>GEORGIA</b>	Under jurisdiction of State Commission:
Augusta	Beverly
<b>ILLINOIS</b>	Boston
State Commission, Springfield	Brockton
Aurora	Cambridge
Chicago	Chelsea
Cook County: 547 County Court House, Chicago	Chicopee
Lincoln Park: Chicago	Everett
South Park: Chicago	Fall River
West Park: Chicago	Fitchburg
Elgin	Gloucester
Evanson	Haverhill
Peoria	Holyoke
Rockford	Hyde Park
Springfield	Lawrence
Waukegan	Lowell
<b>IOWA</b>	Lynn
Burlington	Malden
Cedar Rapids	Marlboro
Council Bluffs	Medford
Des Moines	Melrose
	Milton

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Natick	Gloversville
New Bedford	Hornell
Newburyport	Hudson
Newton	Ithaca
North Adams	Jamestown
Northampton	Johnstown
Pittsfield	Kingston
Quincy	Lackawanna
Salem	Little Falls
Somerville	Lockport
Springfield	Middletown
Taunton	Mount Vernon
Woburn	Newburgh
Worcester	New Rochelle
MICHIGAN	New York City
Detroit	Niagara Falls
Grand Rapids	North Tonawanda
Kalamazoo	Norwich
Saginaw	Ogdensburg
MINNESOTA	Olean
Duluth	Oneida
Minneapolis	Oneonta
MISSOURI	Oswego
Kansas City	Plattsburgh
St. Louis Efficiency Board	Port Jervis
MONTANA	Poughkeepsie
Butte	Rensselaer
Missoula	Rochester
NEW JERSEY	Rome
State Commission, Trenton	Salamanca
No local commissions	Saratoga Springs
Under jurisdiction of State Commission:	Schenectady
East Orange	Syracuse
Elizabeth	Tonawanda
Jersey City	Troy
Newark	Utica
Paterson	Watertown
Trenton	Watervliet
Village of South Orange	Yonkers
Essex County	OHIO
Hudson County	State Commission, Columbus
Mercer County	Akron
Passaic County	Alliance
Union County,	Ashland
NEW YORK	Ashtabula
State Commission, Albany	Athens
Albany	Barberton
Amsterdam	Bellaire
Auburn	Bellefontaine
Batavia	Bowling Green
Beacon	Bucyrus
Binghamton	Cambridge
Buffalo	Canal Dover
Canandaigua	Canton
Cohoes	Cincinnati
Corning	Chillicothe
Cortland	Cireleville
Dunkirk	Cleveland
Elmira	Columbus
Fulton	Conesaut
Geneva	Coshocton
Glens Falls	Dayton
	Defiance

APPENDICES

Delaware  
Delphos  
East Cleveland  
East Liverpool  
Elyria  
Findlay  
Foetoria  
Fremont  
Galion  
Gallipolis  
Glenville  
Greenville  
Hamilton  
Ironton  
Jackson  
Kenton  
Lakewood  
Lancaster  
Lima  
Lorain  
Manfield  
Marietta  
Marien  
Martins Ferry  
Massillon  
Middletown  
Mount Vernon  
Nelsonville  
Newark  
Newburg  
New Philadelphia  
Niles  
Norwalk  
Norwood  
Plainsville  
Piqua  
Portsmouth  
Salem  
Sandusky  
Sidney  
Springfield  
St. Bernard  
St. Marys  
Staubenville  
Tiffin  
Toledo

Troy  
Urbana  
Van Wert  
Warren  
Washington  
Wallstone  
Wellsville  
Wooster  
Xenia  
Youngstown  
Zanesville  
OKLAHOMA  
Bartlesville  
Oklahoma  
OREGON  
Portland  
PENNSYLVANIA  
Philadelphia  
Pittsburgh  
Scranton  
SOUTH CAROLINA  
Columbia  
TENNESSEE  
Memphis  
Nashville  
TEXAS  
Dallas  
Houston  
VIRGINIA  
Norfolk  
WASHINGTON  
Bellingham  
Everett  
Seattle  
Spokane  
Tacoma  
WEST VIRGINIA  
Bluefield  
Parkersburg  
WISCONSIN  
State Commission, Madison  
La Crosse  
Milwaukee  
Oshkosh  
Superior

REC'D  
CHEROKEE  
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## APPENDIX C

### INFORMATION FOR THOSE SEEKING TO ENTER THE PUBLIC SERVICE

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In applying for information regarding civil service positions, it is best simply to address the Commission. Thus, for information about the Federal Service, address as follows:

UNITED STATES CIVIL SERVICE COMMISSION,  
WASHINGTON, D. C.

The "Manual of Examinations of the United States Civil Service Commission," issued in the spring and fall of each year, contains full answers to most of the questions which applicants have to ask. No copies of questions asked in former examination papers are supplied. When mailing your request to the United States Civil Service Commission be sure to attach proper postage to your envelope but do not enclose stamps for reply.

In all other cases, write to the Civil Service Commission at the address given in the table in Appendix B. If possible, specify particularly the position for which you wish to be examined or concerning which you desire information.

The announcements of civil service examinations are posted on the bulletin boards of libraries, educational institutions, post-offices, custom houses and other public places.

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## PUBLICATIONS OF BUREAU OF MUNICIPAL RESEARCH

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Municipal Administration and Accounting (Cleveland) (1909), 361 p. ....	2.12
To Mayors, Comptrollers and Auditors, Scientific Accounting Methods (1911), 76 p. ....	.15
New York's City Debt: Facts and law relating to the constitutional limitation of New York's indebtedness (1909), 83 p. ....	.25
Condition of New York State Sinking Funds (1915) .....	.60
Will Taxes Increase in Greater New York? Tendency to Increase in Require- ments (1913), 56 p. ....	.15
Accounting and Reporting Methods, State of New York (1916) .....	1.00
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Finance, Budget and Accounting Methods, Syracuse (1912), 8 p. ....	.10
Next Steps in the Development of a Budget Procedure in the City of New York (1915), 142 p. ....	.50
Financial Problems of The City of New York, 70 p. (March, 1915) .....	.75
State Finances, Financial Procedure of the State of New York, 19 p. (August, 1915) .....	.25
<b>GENERAL GOVERNMENT</b>	
Organized Democracy: An Introduction to a Study of American Politics (Cleve- land) (1913), 479 p. bound. ....	2.62
American Government and Politics (Beard), 2nd ed. (1914), 788 p. bound. ....	2.10
Readings in American Government and Politics (Beard) (1913), 638 p. ....	1.90
<b>STATE GOVERNMENT</b>	
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Financial History; Session of Legislature; N. Y. State (April, 1916) .....	1.00
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Efficiency and Next Needs of St. Paul's Health Department (1913), 48 p. ....	.10
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The Park Question, Part I. Administrative and Accounting Methods (1908), 152 p. ....	1.00
The Park Question, Part II. Revenue and Deposits (1908), 124 p. ....	.50
<b>POLICE</b>	
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<b>TENEMENT HOUSE</b>	
Tenement House Administration (1909), 175 p. ....	.50
<b>WATER</b>	
Collecting Water Revenues (1909), 223 p. ....	.50

List of Earlier Publications, 1907-1912, furnished on application. In ordering, address  
Bureau of Municipal Research, 261 Broadway, New York City.

## Bureau of Municipal Research

261 Broadway, New York

*Established, January, 1906—Incorporated, May, 1907*

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