Governmental costs and taxes.

in some rural New York town

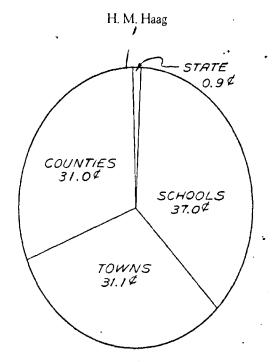
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Governmental Costs and Taxes in Some Rural New York Towns



THE FARMERS' TAX DOLLAR

For the average of 71 rural towns in 1930, approximately one-third of the rural property tax was for each of the three local units, the county, the town, and the school district

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GOVERNMENTAL COSTS AND TAXES IN SOME RURAL NEW YORK TOWNS1

H. M. HAAG

During the past twenty years, the proportion of the national income required to pay the cost of government has been rapidly increasing. fact together with the difficulty of paying taxes in a period of falling prices and declining business activity such as has occurred since 1929, has focused attention on the cost of government.

Owners of property have been particularly interested in taxes and the cost of government because property taxes have been rising rapidly. Since 1914, property taxes in this State have risen from \$23.50 to \$64.11 per capita, an increase of 172.8 per cent (table 1). Clearly this increase pre-

TABLE 1. INDEX OF TOTAL STATE AND LOCAL PROPERTY TAXES PER CAPITA, NEW YORK STATE, 1914-1931*

Year	Taxes per capita	Index 1914 = 100	Year	Taxes per capita	Index 1914 = 100
•	Dollars			Dollars	
914	23.50	100.0	1923	44.88	191.0
915	25.16	107.1	1924	47.70	203.0
916	26.48	112.7	1925	49.17	209.2
917	28.56	121.5	1926	52.51	223.4
918	30.62	130.3	1927	57.15	243.2
919	31.82	135.4	1928	61.74	262.7
920	35.30	150.2	1929	63.85	271.7
921	41.64	177.2	1930	63.17	268.8
922	42.46	180.7	1931	64.11	272.8

^{*}Calculated from data obtained from the Report of State Tax Commission, 1931.

sents a problem for property owners whether their holdings are in the city or the country. This study, however, deals chiefly with the costs of government in rural towns.

TABLE 2. PROPERTY TAX RATES PER \$1,000 FULL VALUE OF REAL PROPERTY, ALLE-GANY, CHENANGO, GENESEE, AND SCHUYLER COUNTIES, 1930*

Unit of government	Units	Tax rate	Proportion of total
School districts	Number 603 71 4	Dollars 7.30 6.12† 6.11 0.18	Per cent 37.0 31.1 31.0 0.9
Total	******	19.71	100.0

[&]quot;The Farmers' Tax Dollar. By M. P. Catherwood and H. M. Haag. Farm Economics, Number The parmers 1ax Dollar. By m. r. cauciewood and in m. mag. rain accounting a find the special tax levy of 42 cents to pay county

expenditures charged to towns (table 22).

¹This manuscript was prepared from a thesis presented to the Faculty of the Graduate School of Cornell University, June, 1933, in partial fulfillment of the requirements for the degree of doctor of philosophy.

AUTHOR'S ACKNOWLEDGMENTS. The writer is indebted to the town and county officers from whom many of the data for this study were obtained. He wishes to express his appreciation to Dr. M. P. Catherwood for his constructive criticism and helpful suggestions during the course of this study. The writer is also indebted to Dr. M. Slade Kendrick for his assistance in the organization and preparation of this manuscript.

The property taxes paid by farmers are principally for county, town, and school-district purposes. The State makes a small levy for armory and court and stenographers' expenses. For the four rural counties, Allegany, Chenango, Genesee, and Schuyler, the total tax rate for school, town, county, and State in 1930 averaged approximately \$20 per thousand dollars of taxable property. Of this total property tax, 37 per cent was levied by the school districts, 31.1 per cent by the towns, 31 per cent by the counties, and less than 1 per cent by the State (table 2 and cover).

PURPOSE OF STUDY

The purpose of this study was to obtain detailed and reliable information concerning the costs of town government in New York State, and to relate these costs to certain economic and physical factors to determine the reasons for variations in the cost of town government. It was believed that the accomplishment of this purpose would make possible the instruction of the taxpayer regarding his town government, and thus increase the value of his cooperation in the solution of its problems.

SOURCES OF DATA

The 71 towns of Allegany, Chenango, Genesee, and Schuyler Counties are included in this study. Most of the data were obtained from the financial records of these towns. Additional information was acquired from county records. The data cover the calendar year 1930. All costs incurred in 1930 were included whether or not they were paid in that year. Likewise, all income for the year 1930 was included whether or not it was received in that year. Sufficient information was obtained to permit a detailed classification of receipts and expenditures. In addition, the value of the highway machinery and the storage building for it and the depreciation on these items were estimated by the town superintendent of highways. The supervisor and the town clerk estimated the value and depreciation of the town hall, the safes, and other town equipment.

Other data were taken from various published and unpublished reports. Among these were: The Report of the State Tax Commission, the U. S. Census of 1930, unpublished data of the State Department of Public Works, the Report of Municipal Accounts by the Comptroller, the supervisors' annual reports to the Comptroller, the annual reports of the boards of supervisors, McKinney's Consolidated Laws of New York, and Bender's Manual.

UNITS OF LOCAL GOVERNMENT

The State of New York outside New York City is divided into 57 counties. Each of these counties is divided into towns (townships) and cities. The State contains 932 towns. The number per county ranges from 3 to 33. There are also 59 cities in these counties. In addition, there are 527 incorporated villages in this State. These villages respect neither town nor county boundaries for they may be in more than one town or county. All these units, the counties, the towns, the cities, and the incorporated villages provide general functions of government such as the upkeep of roads or streets, and the protection of persons and property.

The State of New York is also divided into approximately 10,000 school

districts, of which there are 603 in the 71 towns studied. The number ranged from 1 to 29 per town; the average was approximately 8.

There were 2368 special districts in this State in 1930. These special districts provide light, water, fire protection, sewage disposal, and other

special services. They generally serve unincorporated villages.

In 1930, the organized units of local government in the areas studied were 4 counties, 71 towns, 2 cities, 30 incorporated villages, 603 school districts, and 34 special districts.

DESCRIPTION OF TOWNS STUDIED

Among the 71 towns studied, taxable wealth, 2 population, town-highway mileage, and area vary widely. These different factors may be regarded as measures of the size of towns. A study of the variations in these factors associated with differences in the costs of various services of government should reveal some of the reasons why the cost of government is higher in some towns than in others.

Taxable wealth is one of the factors that greatly affects property tax rates, and is the most variable of the measures of size indicated above. The range in wealth per town, per square mile, and per mile of town highways was extremely wide (table 3). Wealth per capita did not vary so greatly. The taxable wealth per town averaged approximately two and one-fourth million dollars.

TABLE 3. Taxable Wealth, Population, Highway Mileage, and Area per Town, 71 Towns, 1930

Pactor -	Lowest	Highest	Median	Average
Taxable wealth:	A194 000	410 101 000	A1 2000	******
Per town	\$134,000	\$12,461,000	\$1,770,000	\$2,238,000
Per capita	\$443	\$4,429	\$1,197	\$1,529
Per square mile	\$4,900	\$353,000	\$47,900	\$60,100
Per mile of town highways	\$2,800	\$315,400	\$30,800	\$ 36,500
Population:				
Per town	258	6,909	1,197	1,464
Per square mile	10	195	32	39
Farm population as per			1	,
cent of the total	8	97	58	44
		1	,	
Town highways per town,	00 a			1
miles	23.8	173.7	58.7	61.4
Per cent of total highways in		1		ł
various systems:	40			
Town	63	98	81	80.9
State	o o	27	12	11.5
County	U	22	.8	7.6
Square miles per town	17.2	108.1	35.3	37.2

Certain costs of government, such as those for election, health, and protection, are related to population. Variations in population, therefore, are important. The population per town ranged from 258 to 6909 persons and

Throughout this study, taxable wealth and wealth are used interchangeably with full value of taxable property. The tull value of the taxable property is the assessed value of real property raised to full value by means of the equalization ratio of the State Tax Commission. (For a description of the method of obtaining this ratio, see Report of the State Tax Commission, page 81, 1930). For example, the assessed value of real property in the Town of Coventry was \$459,670 and this assessed value was 90 per cent of the full or sales value of the property. Hence, the full value of taxable property in this town was \$459,670 divided by 90/100, or \$510,744. Personal property was omitted because it is insignificant as taxable wealth in most towns, and because many towns make no attempt to assesse it.

averaged 1464 (table 3). Population per square mile was almost as variable. The proportion of the population living on farms ranged from 8 to 97 per cent. For the average of all towns, 44 per cent of the total was farm

population.

The town highway mileage is one measure of the need for highway expenditures by the town. It ranged from 23.8 to 173.7 miles and averaged 61.4 miles (table 3). A small mileage of town highways may result either from the existence of few roads within the town or because of the proportion of highways in the town included in the State and county systems. The proportion of town highways to total highways ranged from two-thirds to practically all the highways.

TOWN INCOME

In 1930, for the 71 towns studied, the income averaged \$18,109 (table 4). Of this amount, the property tax averaged \$11,304.50, or 62.4 per cent. State aid for town highways provided \$2089.10, and the town share of the personal income tax supplied \$2073.20, each of which was more than 11 per cent of the town receipts. Rentals received for the use of town machinery averaged \$980.70, and were 5.4 per cent of the town income. The town share of the franchise tax on the net income of business corporations yielded \$657.50 per town, or 3.6 per cent of town receipts. The sale of bonds accounted for \$323.90, or less than 2 per cent of total receipts Receipts from dog licenses, bank taxes, and mortgage taxes, each, approximated \$150 per town, or 0.8 per cent of town income. Rents, fines and licenses, and interest were of relatively less importance as a source of town revenue.

TABLE 4. INCOME PER TOWN, 71 TOWNS, 1930

Source of income	Amount per town	Proportion of total
	Dollars	Per cent
Property tax	11.304.50	62.4
State aid for town highways	2,089.10	11.6
ncome tax	2.073.20	11.5
Machinery rentals	980.70	5.4
Franchise tax	657.50	3.6
Rond sales	323.90	1.8
Dog licenses	148.40	0.8
ank tax	147.60	0.8
Mortgage tax	143.90	0.8
Rents	96.90	0.5
Pines and licenses	90.10	0.5
Bank interest	53.20	0.3
Total	18,109.00	100.0

The town income varied widely among the towns. In those towns which had less than \$1,000,000 of taxable wealth, receipts averaged \$9935 per town (table 5). As wealth per town increased, receipts per town increased. Thus, in the towns with \$3,000,000 of taxable wealth, town receipts averaged \$32,139.

The proportion of town income received from the different sources also varied as the wealth of towns increased. As taxable wealth per town increased, the proportion of town income from property taxes and from state aid for town highways declined (table 5). The other important sources of town income increased with the wealth of towns.

TABLE 5. RELATION OF TAXABLE WEALTH TO INCOME PER TOWN, 71 TOWNS, 1930

	Taxable wealth per town			Taxable wealth per town			
Source of income	Less than \$1,000,000	\$1,000,000- 3,000,000	\$3,000,000 or more	Less than \$1,000,000	\$1,000,000- 3,000,000	\$3,000,000 of more	
	Income per town			Proportion of total			
4	Dollars	Dollars	Dollars	Per cent	Per cent	Per cent	
Property tax	6,868	11,652	18,483	69.1	63.8	57.5	
state aid for town			'				
highways	1,808	1,885	2,926	18.2	10.3	9.1	
ncome tax	713	1,963	4,639	7.2	10.7	14.4	
Machinery rentals.	220	947	2,370	2.2	5.2	7.4	
ranchise tax	105	340	2,160	1.1	1.9	6.7	
Bond sales		852			4.7		
Dog licenses[114	170	173	1.1	0.9	0.5	
Bank tax	25	166	331	0.3	0.9	1.0	
Mortgage tax	36	85	432	0.4	0.5	1.4	
Rents	15	83	264	0.1	0.4	0.8	
ines and licenses.	19	72	244	0.2	0.4	0.8	
Bank interest	12	58	117	0.1	0.3	0.4	
Total	9,935	18,273	32,139	100.0	100.0	100.0	

PROPERTY TAXES

The property taxes for general-fund purposes³ averaged approximately \$3000, and were 26.6 per cent of the town property taxes (table 6). Those for the highway repair and improvement fund were 34.7 per cent of the total

TABLE 6. PROPERTY TAX LEVIES BY FUNDS, 71 TOWNS, 1930

Fund	Property tax per town	Proportion of total
General Highway repair and improvement. Bridge, machinery and miscellaneous.	Dollars 3,003.90 3,929.10 4,371.50	Per cent 26.6 34.7 - 38.7
Total	11,304.50	100.0

and for the bridge, machinery, and miscellaneous funds, 38.7 per cent. The highway-repair-and-improvement-fund tax is levied on all taxable property outside incorporated villages; the other town taxes are levied on all property in the town, including that in incorporated villages.

In general, the property tax for each fund is determined by estimating for the next year the expenditures and the income from sources other than property, and levying as the property tax the difference between such estimated expenditures and other income. Because this method of determining the property tax is used, the property tax varies from year to year with differences in town expenditures and income other than property taxes.

These town taxes as well as the property tax levy for county purposes are collected by the town tax collector. From his collections, the collector

aMost supervisors keep five funds for town purposes. These are the general fund and the four highway funds. Theoretically, the general fund is for expenditures other than those for highways, but actually, considerable highway expense is met from the general-fund income. The four highway tunds are: highway repair and improvement, bridge, machinery, and miscellaneous. They are often reterred to as Items 1, 2, 3, and 4, respectively. The nature of the expenditures included under each of these funds varied widely among the towns. For the purposes of this study, no distinctions were made in highway expenditures which would conform to the above classification.

pays the amount of the town levies to the supervisor and the remainder to The county assumes responsibility for uncollected the county treasurer. taxes.

STATE AID FOR TOWN HIGHWAYS

At the time of this study, three factors determined the amount of state aid. These were: the assessed value of real and personal property outside incorporated villages, the mileage of all highways, namely, town highways, county roads, and state highways, and the tax levy for the repair and improvement of highways (item 1). Towns in which the assessed value of real and personal property outside incorporated villages was less than \$5000 per mile of all highways, received state aid equal to the property tax levied for repair and improvement, except that no town could receive more than \$25 per mile. For each additional \$2000 assessed valuation per mile up to \$13,000, the ratio of state aid to the highway tax declined 10 per cent, but no town could receive more than \$25 per mile. In the towns with more than \$13,000 assessed value per mile, state aid equal to 50 per cent of the tax was granted, but the towns with less than \$25,000 assessed valuation per mile could not receive more than \$25 per mile and in the towns with more than \$25,000 per mile, state aid was limited to one-tenth of one per cent of their assessed valuation. Therefore, the towns with an assessed value of \$50,000 per mile could receive as state aid a maximum of 0.1 per cent of \$50,000 or \$50 per mile. Because of this provision, the wealthiest towns received the most state aid per mile.

In 1931, the method of granting state aid was changed so that the towns with the least taxable wealth per mile of town highways received more state aid than those with greater taxable wealth.4

STATE-SHARED REVENUES

The personal income, business franchise, and bank taxes are state-shared revenues inasmuch as the State collects them and shares a definite proportion of each with the local units.

One-half of the original net personal-income-tax levy or one-fourth the present levy which includes the emergency levy of 1933 for state purposes is shared with the towns and cities on the basis of the assessed value of real property. Each town is apportioned that part of the total share which its assessed value bears to the aggregate assessed value of the State. If it has no incorporated villages, it receives the full amount apportioned it. But, in those towns with incorporated villages, the town receives an amount determined by the relationship of the assessed value of the entire town⁵ to the sum of the assessed value of the incorporated villages and the assessed value of the entire town.7

One-third of the business franchise tax of 4½ per cent on the net income

^{*}In 1931 and 1932, each town which levied a tax of \$3 or more per \$1000 full value for item 1 received at least \$50 state and per mile of town highways. However, those towns in which the \$3 tax vielded less than \$50 per mile received as state aid the difference between \$100 per mile of town highways and the amount raised by the \$3 tax. Each town which had a tax levy of less than \$3 per mile of town highways received \$50 per mile if its repair-and-improvement-fund tax amounted to \$50 per mile, but if the levy was less than \$50 per mile, an amount equal to the tax raised was given as state aid. Two exceptions to these general rules are unimportant. In 1931 the measure of wealth was full value instead of the assessed value of real and personal property as in 1930, and town-highway mileage was used instead of the mileage of all highways.

*As determined by town assessors.

^{*}As determined by village assessors.

*As determined by village assessors.

*From McKinney's Laws of New York, Tax Law, Section 382.

of domestic and foreign corporations is shared with cities and towns according to the location of the tangible personal property of the corporations. If the property of a corporation is in an incorporated village, the third of that corporation's tax should be apportioned between the village and the town in which the village is located, on the basis of the relative contribution toward town and village taxes of the property outside the village as compared with the property inside the village."

The entire 41/2-per-cent tax on the net income of banks and financial corporations is returned to the local units on the basis of the location of the bank and the assessed value of real and personal property in the units entitled to share in the taxes. These units are: city, town, incorporated

village, school district, and special district.9

OTHER INCOME

Rentals were received for the use of town-highway machinery. They generally included the wages of the operators.

Receipts from bond sales are the amount of bond sales in excess of payments for the retirement of bonds. In this study, receipts from short-term

borrowings are not included as town income.

The dog-license fees received by the county treasurer from town and city clerks are kept in a special fund. Each month 10 per cent of the receipts during the preceding month is forwarded to the State Department of Farms and Markets. The remaining 90 per cent and all fines and damages collected under the provisions of the dog law are used to pay for damages done by dogs and for dog-law enforcement. If, at the end of the calendar year, a surplus has accumulated in this dog-license fund, three-fourths of such surplus is returned to the towns in proportion to their contributions to the fund during the year. If a deficit occurs, the amount of the deficit is refunded to the county by the Department of Farms and Markets from the fund in which the 10 per cent of license fees is accumulated.

The mortgage tax is a recording fee of 50 cents per \$100 or fraction thereof. One-half of this fee collected by the county clerk is paid to the State, the other half to the town or city in which the mortgaged property is located. If the mortgaged property is in an incorporated village, the village receives a share of the tax (determined by the ratio which exists between the assessed value of the real and personal property in the village and twice the assessed value of such property in the town which includes the village).

Rents were received for the use of the town hall for dances and other purposes.

Fines collected by the justices of the peace in cases where the justices' fees are town charges are town receipts. Dance-hall, billiard-hall, and other such licenses are sources of town income.

Some towns received interest on cash balances maintained in the town's bank of deposit.

TOWN EXPENDITURES

The town expenditures averaged \$17,528.70 (table 7). These expenditures were classified according to the purpose for which they were

^{*}From McKinney's Laws of New York, Tax Law, Section 219-h. *From McKinney's Consolidated Laws, Tax Law, Section 219-bbb.

made. The cost of town highways approximated \$13,000, or 74.1 per cent of the total town expenditures. Welfare expenditures were 4.6 per cent; debt service, 4.3 per cent; and special services, 3.4 per cent. However, since 1930 town welfare expenditures have greatly increased. The general administration of town affairs exclusive of highways cost \$564.50, or 3.2 per cent of total expenses. The cost of assessing property was 2.3 per cent of town expenses; and the cost of elections, 1.8 per cent. Health services, and buildings and equipment expense, each, accounted for 1.4 per cent of the town expenses, and protection expenditures were 0.9 per cent. Expenditures for tax collection borne by the town, for vital statistics, and for school attendance were relatively less costly. The tax collector's fee was not included in town expenses. Unusual expenditures, such as those for revaluation of public utilities and for special elections, accounted for 1.8 per cent of the total.

TABLE 7.	Town	Expenditures	PER	Town,	71	Towns,	1930
----------	------	--------------	-----	-------	----	--------	------

Expenditures	Amount per town	Proportion of tota
	Dollars	Per ceni
Highway	12.986.10	74.1
Welfare	812.90	4.6
Debt service	754.70	4.3
Special services	602.40	3.4
General administration	564.50	3.2
Assessment	395.20	2.3
Election.	315.70	1.8
Health	246.70	1.3
Buildings and equipment.	241.80	1.4
Protection	163.40	0.9
Tax collection	48.90	Ŏ.3
Vital statistics	44.60	0.3
School attendance	43.70	ŏ.ž
Unusual expenditures	308.10	1.8
Total	17,528.70	100.0

Expenditures per town varied greatly. For example, they increased with the wealth of the towns. In the towns with less than \$1,000,000 of taxable wealth, the cash costs of town government averaged \$9159, but in the towns with more than \$3,000,000 full value of taxable property, the costs were \$32,356 (table 8).

The proportion of the total expenditures represented by the individual items also varied. As the wealth of the towns increased, the expenditures for highways as a proportion of total costs declined, but those for welfare and special services rose (table 8). The relationship of taxable wealth and welfare expense is due largely to the location of the least wealthy towns in the counties where the welfare expense was borne almost entirely by the counties. The trends in the other expenditures were not significant.

HIGHWAYS

In 1930, for the 71 towns studied, cash highway expenditures were \$12,-986.10, or 74.1 per cent of the total expenditures. These expenditures were for town highways, which were principally dirt and gravel roads, and for the repair and construction of small bridges. Of these, approximately \$5000, or 38.3 per cent, were cash expenditures for machinery (table 9). The expenditures for labor averaged nearly \$4500, or 34.3 per cent of the cash highway

TABLE 8. Relation of Taxable Wealth to Expenditures per Town, 71 Towns, 1930

	Taxable wealth per town			Taxable wealth per town			
Items of expenditure	Less than \$1,000,000	\$1,000,000- 3,000,000	\$3,000,000 or more	Less than \$1,000,000	\$1,000,000- 3,000,000	\$3,000,000 or more	
	Exp	enditures per	town	Pı	oportion of to	al	
	Dollars	Dollars	1 Dollars	Per cent	Per cent	Per cent	
Highway	7.023	13.163	23,121	76.7	75.6	71.5	
Welfare	139	650	2,268	1.5	3.7	7.0	
Debt service	540	339	1.832	5.9	1.9	5.7	
pecial services	124	563	1,505	1.4	3.2	4.6	
General adminis-	***	000	2,000	1 -12			
tration	342	636	834	3.7	3.6	2.6	
Assessment	221	434	636	2.4	2.5	2.0	
Election	205	340	469	2.2	2.0	1.4	
Health	110	275	438	1.2	1.6	1.3	
Buildings and	110		1 200		•••	• • •	
equipment	114	324	326	1.2	1.9	1.0	
rotection	59	172	333	0.6	1.0	1.0	
Tax collection	22	55	85	0.3	0.3	0.3	
ital statistics	33	52	53	0.4	0.3	0.2	
School attendance	27	40	79	0.3	0.2	0.2	
Jnusual expendi-	41	***	10	V.5			
tures	200	379	377	2.2	2.2	1.2	
Total	9,159	17.423	32,356	100.0	100.0	100.0	

costs. The cost of highway administration was 11.2 per cent, and of construction materials was 10.4 per cent. Culverts, lumber, bridge steel, asphalt, stone, gravel, cement, and numerous other materials used in the construction and maintenance of highways and bridges were classified as construction materials. Contract construction of bridges and roads, and expenditures for compensation insurance, each, averaged approximately \$200. The cost of horse labor was approximately one per cent of highway expenditures. Expenditures for right of ways, water troughs, and damages to property by highway machinery were negligible.

TABLE 9. HIGHWAY EXPENDITURES, 71 Towns, 1930

Expenditures	Amount per town	Proportion of total
	Dollars	Per cent
Machinery	4.973.70	38.3
abor	4.460.50	34.3
Administration	1.453.90	11.2
onstruction materials	1.347.90	10.4
ontract construction	230.20	1.8
ompensation insurance	217.60	1.7
lorse labor	164.30	1.3
now fence	111.40	0.9
lights of way	19.50	0.1
Vater troughs	4.30	
amages	2.60	
Other	0.20	
Total.	\$12.986.10	100.0

^{*}Less than 0.1 per cent.

Machinery

The expenditures for town-owned machinery were 93.6 per cent of the total machinery expenditures of \$4973.70 (table 10), and for hired machinery were 6.4 per cent. More than one-half of cash expenditures for machinery, or approximately \$2500, was spent for new machinery either as cash purchases or as payments on machinery leases. Under the lease plan, the

holder of the lease, generally a bank, purchased the machinery from the manufacturers. By paying a daily rental for the use of the machine, the

town retired the principal of the lease and its accrued interest.

Expenditures for machinery and operators hired from other towns, or from individuals, were allocated between the machines and the operators. The cost allocated to the machinery was termed hired machinery and the wage of the operator a labor expenditure.

TABLE 10. Machinery Expenditures per Town, 71 Towns, 1930

Expenditure	Amount per town	Proportion of total
	Dollars	Per cent
Town-owned machinery: New machinery Repairs Puel Shop upkeep and supplies.	2,518.20* 995.30 824.30 213.60 102.80	50.6 20.0 16.6 4.3 2.1
Town-owned machinery	4,654.20 319.50	93.6 6.4
Total	4,973.70	100.0

^{*}Includes cash purchases and payments of interest and principal on leases.

Labor

The expenditures for labor were approximately one-third of highway costs. This labor included that of truck drivers and other machinery operators, which was classed as *skilled labor*, and the labor of persons not operating machinery, classed as *common labor*. It also includes the labor of teamsters, where the team and driver were hired by the town, and the labor of machinery operators where the machine and operator were hired. It does not include the expenditures for labor engaged in repairing highway machinery or the highway building. Such expenditures were regarded as for machinery.

Highway administration

The expense for highway administration included the salary and expense of the town superintendent, the salary of the supervisor for handling town highway money, and the town clerk's salary for his highway duties (table 11). The surety bonds for the supervisor and the town superintendent were additional costs of highway administration.

TABLE 11. Expenditures per Town for Highway Administration, 71 Towns, 1930

Expenditures	Amount per town	Proportion of total
	Dollars	Per cent
For town superintendent; Salary	1,211.10 18.30	83.3 1.3
Total Supervisor's salary. Town clerk's salary. Surety bonds	1,229.40 167.10 35.30 22.10	84.6 11.5 2.4 1.5
Total	1,453.90	100 0

The town superintendent of highways is in charge of the maintenance and construction of town highways and bridges. The town superintendent is little more than a laborer in some towns, but in others, he is a foreman or overseer.

The compensation of the highway superintendent depends on the number of days he works and the wage rate. The wage rate is fixed by the town board. In 1930, 23 towns were paying \$5 a day, and 22 of them \$6. range was \$4 to \$7 a day, the average \$5.70. The number of days which the superintendent worked ranged from 80 to 313; the average was 212.5. The range was 150 to 250 days in 40 of the towns.

The supervisor is the treasurer of the town highway funds, and disburses these moneys on the order of the town superintendent. In addition, the supervisor performs some supervisory duties in cooperation with the town superintendent. His highway salary is fixed by the town board.

The town clerk is responsible for the preservation of the audited records of highway receipts and expenditures. The town board fixes the highway

salary of the town clerk.

WELFARE

The first responsibility for the care of dependent persons falls on certain close relatives 10 of the needy individual. If none of these relatives capable of caring for the person is found, the aid must be given by some governmental unit. The town is responsible for the aid of needy citizens who have a settlement11 in the town unless the county or State has assumed the charge. A person receiving aid but having no legal settlement in any town or city of this State is a county charge, if the person has lived in the State 60 days. He is a state charge if he has been in the State less than 60 days. In addition, dependent Indians and aliens are state charges.

In 1930, for the 71 towns studied, the welfare expenditures averaged \$812.90 (table 12). Of this amount, approximately one-half was for food, clothing, and shelter, the most important of which was food. The cost of food for the needy was almost one-third of the welfare expenditures. board and care of dependent citizens in the homes of others accounted for one-fifth of the cost of welfare. In Schuyler County, which has no county home, the cost of board and care was unusually large. Medical aid and burials were other important forms of relief. Since 1930, town welfare expenditures have become much larger.

The expenditures for welfare officers averaged 8.1 per cent of welfare expense. In most towns, the welfare officer investigates the cases of needy persons within the town, and authorizes the supervisor to pay for the necessary aid administered. In some towns, the supervisor performed some or all of the duties of the town welfare officer.

DEBT SERVICE

Approximately 70 per cent of the expense for debt service was for the retirement of bonds, and 25 per cent for interest on bonds (table 13). Thus bonds were responsible for nearly 95 per cent of the cost of debt service.

le in 1930, these relatives were bushand, wife, father, mother, grandparent, child, grandchild, and

step parents.

11 A person who has lived continuously without aid in a town for one year has a legal settlement in that town. He does not lose his settlement, once established, except by continued residence without aid for one year in another town or city.

TABLE 12. Welfare Expenditures per Town, 71 Towns, 1930

Expenditures	Amount per town	Proportion of total
	Dollars	Per cent
Pood, clothing, and shelter:	OAR MA	20.0
Pood	. 267.70	32.9 9.2
Puel	74.50	4.3
Rent	34.90 20.00	2.5
Clothing	20.00	2.0
Total	397.10	48.9
Board and care	163.30	20.1
Medical aid:		
Doctors	51.20	6.3
Hospitals	27.00	3.3
Nurses	10.50	1.3
Medicines	1.60	0.2
Total	90.30	11.1
Burials	67.80	8.3
Cash allowances	19.10	2.4
Other relief:	5125	
Transportation	3.40	0.4
Household supplies.	2.60	0.3
School supplies	1.10	l ő.i
Miscellaneous	2.50	0.3
Total	9.60	1.1
Administration:		
Welfare officer's salary	61.80	7.6
Office supplies.	3.90	l ö.š
•••		
Total	65.70	8.1
Total	812.90	100.0

Interest on notes and expenses for bond flotation were relatively less important. In this study, the expenditures for the retirement of bonds in each town were taken to be the amount of bonds retired in excess of receipts from bond sales. Payments for the retirement of temporary loans were not included.

TABLE 13. DEBT SERVICE PER TOWN, 71 TOWNS, 1930

Expense	Amount per town	Proportion of total
	Dollars	Per cent
Retirement of bonds	522.50	69.2
nterest on bond	190.20	25.2
nterest on note	37.20	4.9
Bond flotation expense	4.80	0.7
Total	754.70	100.0

SPECIAL SERVICES

The citizens in many towns were provided special services in addition to those provided by all towns. In some, light or fire districts were supported by the entire town rather than by a special district embracing only a part of the town, as is usually the situation (table 14). Additional health services, such as providing a health nurse, were maintained in other towns. Libraries were commonly aided. Many other such services were provided. Although no town supported many of these various special services, nearly every town with considerable wealth provided some additional services.

Expenditures	Amount per town	Proportion of total
	Dollars	Per cent
Street lights	138.40	23.0
rire protection	87.60	14.5
pecial health services	90.90	15.1
braries	67.80	11.2
Iospital appropriations	49.30	8.2
eterans' organizations	33.70	5.6
treets and sidewalks	33.70	5.6
emeteries	30.70	5.1
Memorial Day services	20.90	3.5
Reforestation	18.70	8.1
and concerts	16.20	2.7
arks	8.20	1.4
Other	6.30	1.0
Total	602.40	100.0

TABLE 14. Expenditures for Special Services, 71 Towns, 1930

GENERAL ADMINISTRATION

The general administration of town affairs, and especially those other than highways, is a function of the town board. In the towns studied, the town board consisted of four justices of the peace, the supervisor, and the town clerk. The supervisor is chairman of the board. In addition to actions taken in formal board meetings, the members of the town board may perform certain administrative duties outside the board meetings.

In 1930, the compensation of administrative officers was approximately four-fifths of the cost of general administration (table 15). Expenditures for office supplies, surety bonds and legal services were of lesser importance.

TABLE 15. Expenditures per Town for General Administration, 71 Towns, 1930

Expenditures	Amount per town	Proportion of tota
Salaries and fees:	Dollars	Per cent
Supervisor Justices of the peace. Town clerk. Town auditors.	260.50 136.10 55.40 1.50	. 46.1 24.1 9.8 0.3
Total	453.50	80.3
Office supplies	51.30	9.1
Supervisors Town clerk	45.90 1.50	8.1 0.3
Total	47.40	8.4
Legal services	12.30	2.2
Total	564.50	100.0

One of the most important town duties of the supervisor is that of town treasurer. For handling the state-aid money for schools12 and for handling the town general-fund money, he receives a fee of one per cent. Most super-

Uln 1930, with the exception of village schools under village superintendents, the supervisor was custodian of the state aid apportioned to schools in his town. Since 1932, the county treasurers have paid state aid for union free schools and for central rural schools directly to the treasurers of these schools. Hence, at the present time, these moneys are not handled by the supervisors.

visors regard the school fees as part of their remuneration for handling general town affairs, hence in this study they are regarded as part of the cost of general administration. These fees constituted the greater part of his compensation for general administrative duties (table 16). He also receives pay as chairman of the town board and for special services such as conferences with other town officials.

TABLE 16. Nature of Services and Compensation of Administrative Offices, 71 Towns, 1930

	Remuneration to—				
Nature of services	Supervisor	Four justices of the peace	Town clerk	Town auditors	Total remuneration
Handling school money Handling general-fund money Town board members Other services		Dollars 128.90 7.20	Dollars 33.00 22.40	Dollars	Dollars 154.50 60.40 194.70 43.90
Total	260.50	136.10	55.40	1.50	453.50

The justices of the peace and the town clerk are paid for attending town-board meetings and for other services. The other services of the justices include attending highway meetings at the county seat, and inspecting machinery or equipment; those of the town clerk include the filing of town records, the delivery of school registers, the reporting of special franchises, and the posting of dog notices. The town clerk is the secretary of the town board. In two towns, in 1930, auditors reviewed the town accounts, after these had been audited by the town board, and paid by the supervisor.

The compensation of town-board members depends on the number of meetings attended and the rate of pay. During 1930, 39 towns had from 7 to 12 meetings, 16 had less than 7, and 16 had 13 or more. The average was approximately 10 meetings. The members of the town board received \$3 per day in 28 towns, \$4 in 41 of them, and \$5 in 2 towns. The average wage was \$3.59 per day.

ASSESSMENT

The assessment of real and personal property within the town is a function performed by three elected assessors. Nearly all the town expense for assessing is the compensation of the assessors (table 17). Transportation and office supplies are relatively negligible. The compensation of each assessor depends on the number of days he works and the wage per day. In 1930, the time spent in assessing averaged 27.5 days per assessor, of which 15.3 days were spent in valuing the property, 6.6 days in copying the assessment rolls, and 5.6 days on such other work as hearing grievances, obtaining information on sales and reviewing assessments. For this work, the wages of the assessors averaged \$4.59 per day. Wages varied, but 38 of the towns paid \$5 per day; others, less. The lowest wage was \$3.50 per day in 3 towns. Transportation expense which was for the use of an automobile by the assessors, either on a mileage or per-diem basis, was charged in some towns, but, in general, the assessors provided transportation without extra charge.

Expenditures	Amount per town	Proportion of total
Salaries (8 assessors) Transportation Office supplies	Dollars 377.70 13.40 4.10	Per cent 95.6 3.4 1.0
Total	395.20	100.0

TABLE 17. Expenditures per Town for Assessors, 71 Towns, 1930

ELECTIONS

The town provides the election hall and the officials to preside over elections, and the county usually provides the ballots and other supplies for voting and the tabulation of votes. Of the election costs borne by the town, 81.5 per cent was the compensation of election officials and 15.3 the remuneration of the town clerk and voting-machine custodian (table 18). The remainder included relatively small expenditures for supplies, for labor in erecting booths, and preparing voting machines, and for peace officers to maintain order on the election premises. Many towns used their town halls for elections, thus avoiding direct expenditures for the rental of election halls. In order to place all towns on a comparable basis, rentals of election halls were regarded as expenditures for buildings and equipment.

TABLE 18. Election Expenditures per Town, 71 Towns, 1930

Expenditures per town	Amount per town	Proportion of total
Dection inspectors and clerks:	Dollars	Per cent
General election	87.80	27.8
Primary election	55.60	17.6
Pirst registration	45.20	14.3
Second registration	43.00	13.6
Piling returns and mileage	21.40	6.8
Instruction	4.50	1.4
Total	257.50	81.5
own clerk and custodian	48.30	15.3
lection supplies.	5.00	
-b		1.6
abor	3.80	1.2
eace officer	1.10	0.4
Total	315.70	100.0

In 1930, the 71 towns had 126 election districts. Thus, the cash cost of elections averaged \$177.90 per district, as compared with \$315.70 per town. These districts are the units for election administration.

Each election district has four election inspectors, two of whom are appointed from each of the two most important political parties in the town by the town board. They preside at elections and registrations. In addition, ballot clerks are required at the general election in districts using ballots or two voting machines. The inspectors, and clerks where used, supervise the voting and tally the votes on election days. During the two registration days, the inspectors register qualified citizens who wish to vote at the general election. Furthermore, one of the inspectors carries the tally of votes cast on election day to the election commissioners, for which, in most districts, he receives \$5 and also 4 cents per mile for the distance he travels. In some districts with voting machines, the inspectors hold schools to instruct voters. They charge a fee for this service.

The wage paid the election officials for each of the four days of election work varied widely. The wages of the inspector for the primary election day ranged from \$4 to \$10 per day; they averaged \$7.84. Forty-seven districts paid \$6 and 49 paid \$10 for the day's work. For first and second registration days, the wages averaged \$6.36 and \$6.06, respectively; the range was from \$4 to \$10 per day. In 81 districts, \$6 was paid for the first registration day, and in 89 districts the same amount was paid for the second registration day. Seventy-one districts paid inspectors and clerks \$10 for services on general-election day and 26 paid \$6. Their pay exceeded the legal maximum of \$10 in three districts. The average was \$8.88 per day.

HEALTH

Each town board must appoint a health officer. In addition, other health services may be provided. Of the total expenditure for health services, more than four-fifths was for the compensation of the health officers (table 19). By law, the health officers' remuneration is fixed at not less than 15 cents per person in towns with fewer than 8000 inhabitants. It may be less than the legal minimum because it is sometimes based on the population of a previous date or because the health officer agrees to accept a smaller sum.

Expenditures	Amount per town	Proportion of total
	Dollars	Per cent
Health officer:		
Salary	188.90	76.6
Convention expense	9.90	4.0
Office supplies and expense	5.40	2.2
Total	204.20	82.8
Board of Health	12.10	4.9
Dairy inspections	6.70	2.7
accinations	6.60	2.7
Disease reports	5.70	2.3
Quarantine officer	3.90	1.6
Disinfectante	2.90	1.2
Disposal of animals and rubbish	2.10	0.8
Other	2.50	1.0
V-MAGE	2.30	1.0
Total	246.70	100.0

TABLE 19. HEALTH EXPENDITURES PER TOWN, 71 TOWNS, 1930

BUILDINGS AND EQUIPMENT

The town rents or owns a building in which town board meetings, elections, and other town meetings are held. Several towns rent additional halls for election purposes. The town buys voting machines, check writers, adding machines, and miscellaneous other equipment. In 1930, these expenditures were \$241.80 per town. Rents for buildings were 48.2 per cent of the total building and equipment expenses, the upkeep of town-owned buildings 33.7 per cent, equipment 14.5 per cent, and land 3.6 per cent.

PROTECTION

The fees and expenses of the justices of the peace as judiciary officers, the mileage, fees, and expenses of the constables, and the preparation of the

jury list are the principal protection costs. In 1930, approximately onehalf the protection expense was for the justices of the peace (table 20). The fees and expenses of the justices in the trying of persons for misdemeanors18 are town charges. For town cases, the constables and deputy sheriffs received certain fees and 15 cents per mile for travel in serving summons, for making arrests, and for similar duties pertaining to these cases. These costs together with surety bonds and supplies averaged twofifths of the protection expense.

Expenditures	Amount per town	Proportion of total
	Dollars	Per cent
Justices of the peace: Fees	60.60 15.50	37.1 9.5
Total	76.10	46.6
Constables and deputy sheriffs: Mileage and fees. Surety bonds and supplies.	58.90 4.70	36.0 2.9
Total	63.60	38.9
Jury list	22.00 1.70	13.5 1.0
Total	163.40	100.0

TABLE 20. PROTECTION EXPENDITURES PER TOWN, 71 TOWNS, 1930

The trial juror lists from which the jurors for county and supreme courts are drawn are made by the assessors, the town clerk, and the supervisor in each town. The cost of preparing these lists averaged \$22.

TAX COLLECTION, VITAL STATISTICS, AND SCHOOL ATTENDANCE

The tax collector receives no remuneration from the town for collecting taxes, but some of his expenses are paid by the town. In 1930, the surety bond and some office supplies provided the collector amounted to \$48.90 per town. The surety bond averaged \$45.50, and the office supplied \$3.40.

The cost of reporting vital statistics averaged \$44.60, of which the fees of the statistician were \$39.90 and the fees of doctors \$4.70. The registrar of vital statistics is required to make a monthly report to the State Commissioner of Health stating the number of births and deaths during the preceding month. The town pays a \$2 fee for each such report. In addition, 25 cents is paid for each birth and death reported and for each burial permit issued. The doctors attending births and deaths are also allowed 25 cents for reporting them to the registrar. In 1930, the doctors claimed approximately one-third of the fees to which they were entitled.

In 1930, there were two vital-statistics districts per town in 9 of the towns.

School-attendance expense is for the compensation of the truant officers who enforce the compulsory-school-attendance laws. 4 In 1930, the remuneration of these officers averaged \$43.70 per town.

MA misdemeanor is a crime for which the punishment cannot be imprisonment in a state prison wile addition to the town truent officer, each union-free or village school shall appoint such an

UNUSUAL EXPENDITURES

In general, unusual expenditures are for items which are not incurred regularly. The revaluation of public utilities by appraisal companies, which is seldom done more often than once every ten years, was 62.9 per cent of the average unusual expenditures of \$308.10 per town. The expenditures for two special elections in one county averaged \$106.80 per town, or 34.7 per cent of the total. In two towns, the town clerk was also tax collector, for which he was paid a salary. That part of the town clerk's salary attributable to tax collection in these two towns was classified as an unusual expense, because the collectors in the other 69 towns were paid by fees and not by the town.

COUNTY EXPENDITURES CHARGED TO TOWNS

Certain expenditures made by some counties are charged back to towns. In 1930, these expenditures averaged \$1380.20 per town, of which 56.4 per cent was for welfare, 38 per cent for highways, and 5.6 per cent for miscellaneous purposes (table 21). The amount of expenditures and their classification varied widely among counties.

TABLE 21. County Expenditures Charged to Towns, 71 Towns, 4 Counties, 1930

Expenditures per town					Proportion	
Expense	Allegany County	Chenango County	Genesee County	Schuyler County	All counties	of total
Welfare	Dollars	Dollars 641.80	Dollars 3,196.80	Dollars 31.90	Dollars 778.80	Per cent 56.4
Highway	740.80 113.20	750.00 88.60	24.80		524.40 77.00	38.0 5.6
Total	854.00	1,480.40	3,221.60	31.90	1,380.20	100.0

Some of the towns paid from town income all or a part of these sums charged back, but generally these expenditures were levied as a special tax on town property in addition to the regular town and county tax levies. In 1930, approximately two-thirds of this amount was paid by special taxes and one-third from town income (table 22). These county expenditures were equal to a tax rate of 62 cents per \$1000 full value of taxable wealth. Since 20 cents of this was paid from town revenues, the special taxes levied to pay for these expenditures averaged 42 cents per \$1000 of taxable wealth.

TABLE 22. Source of Payment for County Expenditures Charged to Towns, 71 Towns, 1930

Source of payment	Amount per town	Amount per \$1,000 taxable wealth	Proportion of total
Special property-tax levy	Dollars 950.70 429.50	Cents 42 20	Per cent 68.9 31.1
Total	1,380.20	62	100.0

SPECIAL DISTRICTS

Special districts are organized to provide special services not already provided by the other units of government. Most of these included in this study were organized in unincorporated villages. In 1930, there were no such districts in Genesee and Schuvler Counties, and there were 34 in Allegany and Chenango Counties; 21 of these were for lighting purposes, 10 for fire protection and water, and 3 were combined fire and lighting districts. The expenditures averaged \$763.40 per district (table 23). The property tax is the almost exclusive source of income from which to meet the expenditures of special districts.

TABLE 23. Expenditures per District, 34 Special Districts, 1930

Type of district	Districts	Expenditures per district
.ighting ire and water ire and light	Number 21 10 3	Dollars 619.60 848.70 1,485.30
Total	34	763.40

VARIATIONS IN COST OF TOWN GOVERNMENT

The cost of town government is the sum of the costs of the many services provided by the town. Therefore, variations in the cost of town government are explained by variations in these different costs. Any study of variations in the costs of government and in the tax rates which are related to these costs must examine variations in the individual expenses as well as variations in the total costs of government.

The actual cash expenditures during any one year do not necessarily represent the true annual cost. For example, purchases of machinery by a town in any one year may be smaller or larger than the average depreciation of machinery. Thus, it is apparent that certain expenditures for permanent equipment should be spread over the years of its use. By so doing, the true annual expense for the item is obtained.

The total cost of town government as determined in this manner averaged \$17,192.60 (table 24). The total expenses for highways, elections, and buildings and equipment were different from the cash expenditures. Highway expense was approximately \$450 less than the cash expenditures, and was reduced from 74.1 per cent to 72.9 per cent of the total. The total expense for elections was more than \$100 greater than the cash outlay, and that for buildings and equipment was \$13.80 larger. These items were 2.5 per cent and 1.5 per cent, respectively, of the total expense. The other items of cost were not changed, and the percentage which they were of the total was not appreciably altered by their expression on a true-cost basis.

For the 71 towns studied, the total cost of town government was \$11.75 per capita, or \$462 per square mile (table 25). As the taxable wealth per town increased, the cost of town government rose from \$7697 to \$31,202 per town. Similarly, the cost per square mile increased rapidly. On the other hand, there was a tendency for governmental expenses per capita to decline as wealth increased. The cost of government relative to taxable wealth decreased from \$23.22 to \$3.21 per \$1000 full value of taxable

TABLE 24. CASH EXPENDIT	URES AND	True Expenses	PER	Town, 7	l Towns,	1930
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Item	Cash expenditures	True expense	Items of cash expenditures as proportion of the total	True items of expense as proportion of the total
	Dollars	Dollars	Per cent	Per cent
Highways	12,986.10	12,527.80	74.1	72.9
Welfare	812.90	812.90	4.6	4.7
Debt service	754.70	754.70	4.3	4.4
Special services	602.40	602.40	3.4	3.5
General administration	564.50	564.50	3.2	3.3
Election	315.70	424.10	1.8	2.5
Assessment	395.20	395.20	2.3	2.3
Buildings and equipment	241.80	255.60	1.4	1.5
Health	246.70	246.70	1.4	1.4
Protection	163.40	163.40	0.9	0.9
Tax collection	48.90	48.90	0.3	0.3
Vital statistics		44.60	0.3	0.3
School attendance		43.70	0.2	0.2
Miscellaneous	308.10	308.10	1.8	1.8
Total	17,528.70	17,192.60	100.0	100.0

wealth. Expenditures do not increase so rapidly as the tax base upon which the property tax is levied; therefore, the cost of government as measured by tax rates falls more lightly on the taxpayers in the wealthy towns.

TABLE 25. Relation of Taxable Wealth per Town, to the Total Cost of Government, 71 Towns, 1930

Taxable wealth per town		Towns	Cost	Cost per	Cost per	Cost per \$1,000 of
Range	Average	104113	per town	capita	mile	taxable wealth
Thousands of dollars		Number	Dollars	Dollars	Dollars	Dollars
Less than 500	332	11	7,697	16.88	239	23.22
500 - 1000	754	17	10,461	13.42	287	13.87
1000 - 2000	1,511	10	14,555	11.68	433	9.63
2000 - 3000	2,504	17	19,036	10.72	515	7.60
3000 - 5000	3,821	12	30,348	15.06	642	7.94
5000 or more	9,732	4	31,202	6.62	913	3.21
Total		71				
Average	2,238	ļ.	17,192	11.75	462	7.68

VARIATIONS IN TOWN-HIGHWAY COSTS

The cost of highways was approximately three-fourths of the cost of town government. Therefore, the magnitude of the various items of highway expense and the variations under different conditions are important factors in the determination of the cost of town government.

True cost

Two items of highway expense, machinery and snow fence, were affected by computing the true highway expense for 1930. This expense averaged \$12,527.80, of which the machinery expense was \$4482 and the snow-tence expense \$144.80 (table 26). Of this true expense for highways, that for machinery was 35.8 per cent, as compared to 38.3 per cent of cash expenditures. Snow fence expense was relatively insignificant. In all analyses of highway costs, the true expense is used because it more nearly represents the actual highway expense in the year of this study.

TABLE 26. Cash Expenditures and True Expense per Town for Highways, 71 Towns, 1930

Expense	Cash expenditures per town	True expense per town	Cash expenditures proportion of total	True expense, proportion of total
Machinery	Dollars 4,973.70	Dollars 4,482.00 4,460.50	Per cent 38.3 34.3	Per cent 35.8 35.6
LaborAdministrationConstruction materials	4,460.50 1,453.90 1,347.90	1,453.90 1,347.90	11.2 10.4	11.6 10.8
Contract construction	230.20 217.60 164.30	230.20 217.60 164.30	1.8 1.7 1.3	1.8 1.7 1.3
mow fence	111.40 26.60	144.80 26.60	0.9 0.1	1.2 0.2
Total	12,986.10	12,527.80	100.0	100.0

Factors which affect highway costs

The mileage of town highways, the intensity of their use, and the taxpaying ability of the property taxpayer, greatly affect the expenditures for highways. Taxpaying ability is represented by the taxable wealth per mile of town highway. This is the amount of wealth over which the cost of the maintenance of a mile of highway can be spread. This study does not include data concerning the number of vehicles passing over town roads, but it is to be expected that the value of the taxable property per mile of town highways bears some relation to the intensity of the highway use.

This expectation is substantiated by data presented in a study of highway traffic in this State. 15 A tabulation of traffic counts made in 1927 shows that on 20 town roads in towns which had less than \$30,000 of taxable wealth per mile of town highways, the traffic averaged 3.3 vehicles per hour (table 27). On the 24 roads in towns having \$30,000 to \$100,000 of taxable wealth per mile, the count averaged 5.2 vehicles per hour. This relationship does not indicate that the increase in taxpaying ability is offset by increased need for highways, for the taxable wealth per mile of highways apparently increases much more rapidly than the use.

TABLE 27. RELATION OF WEALTH PER MILE OF TOWN HIGHWAYS TO TOWN-HIGH-WAY TRAFFIC PER HOUR, 44 TOWN ROADS, 1930*

Value of taxable property per mile of town highways		Roads	Time for which traffic was	Vehicles per hour	
Range	Average		counted	per aour	
Dollars Less than 30,000 30,000 - 100,000	Dollars 23,100 56,100	Number 20 24	Hours 263.5 294.0	Number 3.3 5.2	
Total	39,200	44	557.5	4.2	

^{*}Calculated from data presented in The Relationships Between Roads and Agriculture in New York. May, 1929. By J. L. Tennant. (Cornell Univ. Exp. Sta. Bul. 479. 1929.)

Towns with a large amount of taxable wealth have need for somewhat larger expenditures per mile because the taxable wealth per mile is somewhat related to the intensity of road use. Since the towns with small

MThe relationships between roads and agriculture in New York. By J. L. Tennant. Cornell Univ. Agr. Exp. Sta. Bul, 479:1-84, 1929.

mileage, included in this study, are relatively wealthy, the primary factors responsible for large highway expenditures per mile in such towns are intensity of use and taxpaying ability rather than inefficiencies resulting from a small unit for highway maintenance. To determine the effect of mileage on the efficiency of highway maintenance, it is necessary to present highway costs in terms of cost per unit of work accomplished or to hold intensity of use and taxpaying ability constant while observing the influence of variations in highway mileage on costs.

The 67 towns¹⁶ in which the taxable wealth per mile of highways was less than \$100,000 per mile were divided into two groups according to their wealth per mile of town highways. Each group was divided into two subgroups according to highway mileage. In 35 of these towns, the taxable wealth was less than \$30,000 per mile of town highways, and in 32, it was from \$30,000 to \$100,000. Thirteen towns of the first group had less than 60 miles of highways and 22 had 60 or more. Of the second group of towns, 22 had less than 60 miles of town roads, and 10 had 60 or more.

With this grouping, it is possible to study the relationship of mileage to highway costs while wealth remains relatively constant and, also, to study the effect of wealth on these costs when differences due to highway mileage are eliminated.

TABLE 28. Relation of Taxable Wealth per Mile of Town Highways and Town-Highway Mileage to Highway Expense per Town and per Mile of Town Highways, 67 Towns, 1930

	Ta	xable wea	lth per m	ile	Ta	xable wea	lth per m	ile
	Less tha	n \$30,000	\$30,000	or more	Less tha	n \$30,000	\$30,000	or more
7	Highway	mileage	Highway	mileage	Highway	mileage	Highway	mileage
Expense	Less than 60	60 or more	Less than 60	more 60 or	Less than 60	60 or more	Less than 60	60 or more
	Expense per town	Expense per town	Expense per town	Expense per town	Expense per mile	Expense per mile	Expense per mile	Expense per mile
Labor Machinery Administration Construction materials. Contract construction. Compensation insurance. Horse labor Snow fence Miscellaneous.	911 470 67 114 284	Dollars 4,202 3,306 1,278 880 77 168 216 128 14	Dollars 4,618 5,358 1,643 1,808 137 257 96 183 13	Dollars 6,630 7,359 1,914 2,139 673 341 94 201 40	Dollars 50.50 37.20 18.10 9.30 1.30 2.30 5.60 1.30 0.50	Dollars 52.60 41.40 16.00 10.80 1.00 2.10 2.70 1.70 0.10	Dollars 93.80 108.80 33.40 36.70 2.80 5.20 2.00 3.70 0.30	Dollars 97.40 108.10 28.10 31.50 9.90 5.00 1.40 3.00 0.60
Total	6,350	10,249	14,113	19,391	126.10	128.40	286.70	285.00

The highway expense per town increased with increases in the highway mileage and in the taxable wealth per mile of town highways. It amounted to \$6350 in the towns with the lowest highway mileage and least taxable wealth per mile, and increased to \$19,391 in the towns with the most miles of town highways and greatest wealth per mile (table 28). The cost per mile of town highways did not vary appreciably with in-

If the four towns with more than \$100,000 of taxable wealth were omitted because the wealth relative to highway mileage in these towns was so high and the highway mileage so low that no sorts including them could be made which would allow the highway mileage to vary while the wealth per mile remained relatively constant and which also would allow the wealth to vary as the highway mileage per town remained somewhat the same.

creases in the highway mileage. It increased, however, from \$128 to \$286 per mile as the taxable wealth increased from less than \$30,000 to \$30,000 or more per mile of town highways.

The amount spent per mile for labor, machinery, administration, and construction materials, the largest items of highway cost, did not change significantly with changes in highway mileage, but increased rapidly when the

taxable wealth per mile increased.

The data for highway expense per mile of town highways do not show how much highway work was done, how effectively it was done, nor what it cost per unit. Since this study does not include these measures of accomplishment, it cannot present a complete analysis of highway costs. Nevertheless at this stage of research in the cost of town government, a partial analysis may be helpful. This analysis of highway costs is attempted here through a study of variations in the different items of expense under different conditions.

For towns with less than \$30,000 of taxable wealth per mile of town highways, an increase in the highway mileage increased the proportion which the cost of labor, machinery, and construction materials was of the total town-highway expense, and decreased the proportion represented by highway administration (table 29). For the towns with \$30,000 to \$100,000 of taxable wealth, the proportion of highway expense occasioned by the wages of laborers increased, but the portion attributed to administration and construction materials declined as the highway mileage increased. Among the lesser expenditures, the cost of horse labor in both groups was a smaller share of the highway expense as the highway mileage increased.

TABLE 29. TAXABLE WEALTH PER MILE OF TOWN HIGHWAYS, TOWN-HIGHWAY MILEAGE AND THE PROPORTION WHICH EACH ITEM OF HIGHWAY EXPENSE WAS of the Total, 67 Towns, 1930

	Taxable wealth per mile					
	Less than	\$30,000-\$100,000				
Expense	Town-high	vay mileage	Town-highway mileage			
	Less than 60	60 or more	Less than 60	60 or more		
	Proportion of total	Proportion of total	Proportion of total	Proportion of total		
Labor Machinery Machinery Administration Construction materials Contract construction Compensation insurance Horse labor Snow fence Miscellaneous	29.5 14.4 7.4 1.0 1.8 4.5	Per cent 41.0 32.3 12.5 8.4 0.8 1.6 2.1 1.2 0.1	Per cent 32.7 38.0 11.6 12.8 1.0 1.8 0.7 1.3	Per cent 34.2 37.9 9.9 11.0 3.5 1.8 0.5 1.0 0.2		
Total	100.0	100.0	100.0	100.0		

The proportion of the total highway expense represented by certain items changed markedly as the taxable wealth per mile of town highways increased. For example, the cost of labor, highway administration, and horse labor declined decidedly, and the cost of machinery and construction materials increased as the wealth per mile of town highways became greater (table 29).

A further analysis of the expenditures for labor shows that as the taxable wealth per mile increased, skilled labor became a greater proportion of the labor employed (table 30). Likewise, among the towns with least wealth per mile, the towns with large mileages employed relatively more skilled labor than those with small mileages. Thus, not only was machinery used more extensively in the wealthier towns, but also less unskilled labor was used.

TABLE 30. Relation of Taxable Wealth per Mile of Town Highways, and Town-Highway Mileage, to the Percentage of Hours of Labor Classified as Skilled, 67 Towns, 1930

	Taxable wealth per mile		
	Less than \$30,000	\$30,0 \$100	
Town-highway mileage	Skilled labor as proportion of total	Skilled labo proportion of	
Less than 80	Per cent 23.2 37.0	Per cen 51.9 50.7	ıŧ
Average	33.3	51.4	

Machinery expense

Before noting the variations in machinery expense, the differences among towns in the amount of highway machinery owned as measured by its estimated value, should be considered. The town superintendent estimated the value of the highway machinery as of January 1, 1930 and January 1, 1931. The average of these two values was regarded as the value of the highway machinery for the purposes of this study.

This value of machinery in the towns with the least taxable wealth per mile of town highways and the smallest highway mileage, averaged approximately \$4000 (table 31). As the town-highway mileage and the wealth per mile of town highways increased, the value of the machinery increased.

TABLE 31. Relation of Taxable Wealth per Mile of Town Highways, and Town-Highway Mileage, to the Estimated Value of Highway Machinery, 67 Towns, 1930

	Taxable wealth per mile		Taxable wealth per mile		
	Less than \$30,000	\$30,000-\$100,000	Less than \$30,000	\$30,000-\$100,000	
Town-highway mileage	Value of machinery per town	Value of machinery per town	Value of machinery per mile	Value of machinery per mile	
Less than 60	Dollars 4,140 5,377	Dollars 9,011 9,392	Dollars 82 67	Dollars 183 138	
Average	4,917	9,130	71	166	

Although the amount of machinery per town, as measured by inventory values, was greater in the towns with large mileages of highways under their supervision than in those with small mileages, the amount of machinery per mile of highway declined (table 31). The same machinery can be used for more miles of roads in the towns with large highway mileages. The value of highway machinery per mile of road increased rapidly as the wealth increased, because the greater amount of work done in the wealthier towns permitted the use of more machinery and also because the taxable wealth was large enough to permit machinery purchases.

The total machinery expense includes depreciation instead of cash purchases, since purchases in any one year may not measure the deterioration in machinery as does depreciation. It also includes computed interest

charges not included in cash expenditures.

Machinery expense averaged 31.5 per cent of the total highway expense in towns with the least wealth per mile, and 38 per cent in those with the most wealth per mile (table 29). Seemingly in the towns with the highest wealth per mile, relatively more of the highway work is done by machinery than in those with less wealth. Among the relatively low-wealth towns, a slightly larger proportion of the highway costs was machinery expense in those with the most highway mileage.

The material presented here thus far has not indicated the amount of work done by the machinery nor the cost per unit of this work. Some conclusions concerning the relative amount of the work done by machinery and its cost per unit will be attempted from a study of the different items of machinery expense, and of changes in them as the town-highway mileage

and the wealth per mile of town highways vary.

The items of machinery expense may be roughly divided into two groups: operating costs, which tend to vary with the use of the machinery; and relatively fixed costs that depend more on time than on the use of the machinery. The first group includes fuel, repairs, and shop supplies; the second group includes interest, depreciation, shop upkeep, and insurance.

TABLE 32. RELATION OF TAXABLE WEALTH PER MILE OF TOWN HIGHWAYS AND TOWN-HIGHWAY MILEAGE, TO THE PROPORTION WHICH EACH ITEM OF MACHINERY EXPENSE IS OF THE TOTAL, 67 TOWNS, 1930

	Taxable wealth per mile					
Ì	Less the	s \$30,000	\$30,000-100,000			
	Town-highway mileage		Town-highway mileage			
Ţ	Less than 60	60 or more	Less than 60	60 or more		
Expense	Proportion of total	Proportion of total	Proportion of total	Proportion of total		
lelatively fixed costs:	Per cent	Per cent	Per ceni	Per cent		
Depreciation	49.4	41.8	35.6	31.4		
Interest	13.2	10.3	9.4	7.7		
Shop upkeep	3.6	3.4	3.8	3.7		
Insurance	0.8	1.7	2.1	3.6		
Total	67.0	57.2	50.9	46.4		
lelatively variable costs:			· · · · · · · · · · · · · · · · · · ·			
Repairs	13.1	19.5	26.1	30.5		
Fuel	17.2	20.7	19.8	20.5		
Shop supplies	2.7	2.6	3.2	2.6		
Total	23.0	42.8	49.1	53.6		
Total town-owned ma-	100.0	100.0	100.0	100.0		

The relatively variable costs which depend on use of machinery, became a large proportion of the machinery expense as the town highway mileage and wealth per mile increased (table 32). On the other hand, the costs which depend more on time declined with increases in the highway mileages and in the taxable wealth per mile. As the highway mileage and the wealth per mile increased, the costs depending on use increased relative to those depending on the lapse of time. Therefore, highway machinery was used more days per year in the group with the largest highway mileage and the greatest wealth per mile.

Highway administration

The cost of highway administration per town increased as the highway expenses per town increased. In those towns which spent less than \$7000 for highway purposes, the administrative expense for highways averaged \$835, but in those towns in which the highway expense was \$25,000 or more, the cost of administration was \$2288 (table 33).

TABLE 33. Relation of the Cost of Highway Administration to Highway Expenses, 71 Towns, 1930

Highway expense	ay expense per town Towns Towns Towns			Total highway adminis- trative expense			
		Per town		As propor- tion of high-	Per town	As propor- tion of high-	
Range	Average			way expense		way expense	
Dollars	Dollars	Number	Dollars	Per cent	Dollars	Per cent	
Less than 7,000	5,454	15	707	13.0	835	15.3	
7,000 - 10,000	8,491	18	1,006	11.9	1.178	13.9	
10,000 - 15,000	11,600	17	1,337	11.5	1,577	13.7	
15,000 - 20,000	17,453	7	1,606	9.2	1,866	10.7	
20,000 - 25,000	21,369	10	1,683	7.9	2,028	9.5	
25,000 or more	30,438	4	1,942	6.4	2,288	7.5	
Total	12,528	71	1,229	9.8	1,454	11.6	

Highway administrative expense, however, did not increase so rapidly as the total highway expense. As the highway expense increased, the proportion spent for supervision declined. The costs of administration amounted to 15.3 per cent of the highway expense in towns spending approximately \$5500, and declined to 7.5 per cent as the expenses per town increased to more than \$30,000 (table 33).

Summary

Machinery costs and the wages of skilled labor increased relative to the expenditures for common labor and horse labor as the highway mileage and the wealth per mile increased. Thus, those towns with most work to do, because of more miles of highway or more work per mile, depended more on the use of machinery to perform their highway tasks. The same towns used their machinery more efficiently than did those towns with smaller mileages and less wealth per mile. Because it is believed that machinery is more efficient than horses and common labor for performing highway work and because this machinery is used more efficiently in the towns using it most, it seems that the towns with largest highway mileages and greatest wealth per mile are more efficient in doing their highway work.

VARIATIONS IN COST OF GENERAL GOVERNMENT IN TOWNS

The cost of general government averaged \$4664.80, or approximately one-fourth of the total cost of town government. The important items in general-government cost include welfare, debt service, special services, general administration, elections, assessment, buildings and equipment, and health and protection (table 34). To understand the variations in the cost of general government, variations in the items of expense comprising this cost should be considered.

TABLE 34. Cost of General Government per Town, 71 Towns, 1930

Expense	Amount per town	Proportion of tota
	Dollars	Per cent
Welfare	812.90	17.4
Debt service	754.70	16.2
Special services	602.40	12.9
General administration	564.50	12.1
Election	424.10	9.1
Assessment	395.20	8.5
Buildings and equipment.	255.60	5.5
Health	246.70	5.3
Protection	163.40	3.5
Tax collection	48.90	1.0
Vital statistics	44.60	1.0
School attendance	43.70	0.9
Unusual expenditures	308.10	6.6
Total	4,664.80	100.0

Welfare

Expenditures for welfare in the towns studied, varied with the extent to which the county had taken over the responsibility for relief work from the towns. In Allegany County, all aid, except that for tramps, was paid by the county. Thus, in this county, town expenditures for welfare were small. In the other counties, more of the expenditures for the aid of dependent persons were paid by the town. In these counties, the aid given in the homes of such dependent persons, as well as certain items of relief administered outside the home, was paid by the towns.

In Allegany County, the town welfare expenditures averaged \$28.30; in Chenango, \$324.40; in Genesee, \$1596; and in Schuyler, \$3666.90. These differences resulted largely from variations in the proportion of welfare costs borne by the towns (table 35). In Allegany County, welfare ex-

TABLE 35. Welfare Expenditures per Town and Their Relation to the Total WELFARE EXPENDITURES FOR EACH COUNTY AND THE TOWNS THEREIN, 71 Towns, 4 Counties, 1930

		Town welfare expenditures							
County	Towns	Per town	As proportion of total town expense	Per capita	As proportion of total for town and county				
Allegany Chemango Genesee Schuyag	Number 29 21 13 8	Dollars 28,30 324,40 1,546,10 3,666,90	Per tent 0:2 2:5 5:5 19:6	Dollars 0.02 0.26 0.78 2.27	Par cent 0.9 6.8 22.9 58.7				

penditures averaged 0.2 per cent of all town expenditures; in Schuyler County, 19.6 per cent. Town expenditures per capita for welfare ranged from 2 cents in Allegany County to \$2.27 in Schuyler County (table 35). On a per-capita basis, the town welfare expenditures were 0.9 per cent of the town-and-county welfare expenditures in Allegany County; 6.8 per cent in Chenango; 22.9 per cent in Genesee; and 58.7 per cent in Schuyler County. These great differences in the proportion of welfare expense borne by the town made it impossible to determine the relationships between the wealth and the population of towns and the welfare costs per capita.

In all counties, food, clothing and shelter, board and care, and doctors' services accounted for most of the town welfare expenditures (table 36). Considerable variation existed among the counties in the proportion which the various items were of the total welfare cost.

TABLE 36. Expenditures for Each Item of Welfare Relief as Proportion of Total, 71 Towns, 4 Counties, 1930

Expenditure	Allegany County	Chenango County	Genesee County	Schuyler County				
wapo-ara	Expenditures for each item of welfare relief as proportion of total							
Food, clothing and shelter: Food. Fuel.	Per cent 24.4 0.8	Per cent 27.1 8.9 3.7	Per cent 41.8 11.6 7.6	Per cent 28.2 7.7 2.2				
Clothing	1.9	2.4	1.5	3.2				
Board and care	29.3	4.5	1.9	36.3				
Medical aid: Doctors Hospitals Nurses Medicins	18.2	14.9 0.7 1.4	6.5 7.8 0.2	3.9 0.9 2.1 0.3				
BurialsCash allowances	_	20.5 3.6	7.3 1.9	6.5 2.4				
Other relief: Transportation Household supplies School supplies Miscellaneous	1.5	1.3 0.6 0.1 0.1	0.5 0.3 0.3 0.3	0.1 0.2 *				
Administration: Welfare officer's salary Office supplies	22.2 1.6	9.9 0.3	9.9 0.6	5.1 0.4				
Total	100.0†	100.0	100.0	100.0				

^{*}Less than 0.05 per cent. 1The welfare expenditures for towns averaged only \$28.30 in Allegany County.

Debt service

The expenditures for debt service were extremely variable among the towns and bore little or no relation to the taxable wealth, population, or other characteristics of the towns.

Special services

Expenditures per town and per capita for special services increased as the population of the towns increased. In 1930, as measured by expenditures, the most populous towns provided more than ten times the additional

services provided for residents of the least populous ones (table 37). The expense per capita for these services in the towns with large populations was approximately two and one-half times that in towns with small population.

TABLE 37. Population and Expenditures for Special Services, 71 Towns, 1930

Population per town	Towns	Special services expense			
Range	Average		Per town	Cents 20.1 37.7 48.1	
Number · 0 - 1000 1000 - 1600 1600 or more	Number 605 1,227 2,661	Number 26 22 23	Dollars 122 463 1,279		
Total	1,464	71	602	41.2	

General administration

In 1930, the cost of general administration averaged 12.1 per cent of the cost of general government (table 38). This proportion varied widely among towns. As the average population increased from 605 to 2661, the cost per town for administration increased from \$338 to \$813, but this cost relative to the total declined from 16 to 10.1 per cent.

TABLE 38. Population and the Cost of General Administration, 71 Towns, 1930

Population per town			Cost of general administration			
Range	Average	Towns	Per town	As proportion of the cost of general government Per cent 18.0 13.8 10.1		
Number Less than 1000 1000 - 1600 1600 or more	Number 605 1,227 2,661	Number 26 22 23	Dollars 338 571 813			
Total	1,464	71	564	12.1		

Administrative expense varied widely with differences in the total cost of general government. For the 15 towns which spent less than \$2000 for general government, general administration cost \$301, or 24 per cent of the total (table 39). As the general costs increased, the administrative expense increased to \$1082, which was only 6.5 per cent of the total. Thus, as general costs rise, a smaller proportion is required for administration.

Elections

The total cost of elections includes the cash costs previously discussed, voting-machine charges¹⁷ and the rent of election halls. This cost averaged \$239 per election district (table 40). The cost per district increased with the number of voting machines (table 40). Besides the increase in the

¹¹An annual charge of \$50 was made for each voting machine. This will pay interest at 5 per cent on a voting machine costing \$900 and retire the principal in 48 years. According to estimates voting machines are expected to last 50 years.

TABLE 39. Relation of the Cost of General Government to the Cost of General Administration, 71 Towns, 1930

ost of general government per town			Cost of	Items o	f general rtion of t	administ ne cost of ment	rative exp general go	pense as overn-
Range	Average	Towns	adminis- tration per town	Town-	School- fund fee	General- fund fee*	Other	Total general adminis trative expense
Dollars Less than 2,000 2,000 - 4,000 4,000 - 6,000 6,000 - 10,000 10,000 or more	Dollars 1,258 3,034 4,799 7,912 16,717	Number 15 27 11 14 4	Dollars 301 506 662 733 1,082	Per cent 9.2 6.3 4.3 3.0 2.1	Per cent 6.9 4.5 3.7 2.5 2.0	Per cent 1.5 1.6 1.4 1.1 1.0	Per cent 6.4 4.3 4.4 2.7 1.4	Per cent 24.0 16.7 13.8 9.3 6.5
Total	4,665	71	564	4.2	3.3	1.3	3.3	12.1

^{*}Since some highway expenditures were paid from the general fund, but were not included as general-fund expense in this study, the one-per-cent fee on general-fund expenditures was more than one per cent of the general costs.

voting-machine charge, rent for the election hall and the fees of the town clerk and voting-machine custodian rose as the number of voting machines per district increased.

TABLE 40. Relation of Voting Machines to the Cost of Elections per District, 126 Election Districts, 1930

_	Number			
Expense	0	All districts		
		_		
	Dollars	Dollars	Dollars	Dollars
Cash costs:				
Election inspectors and clerks	154.90	131.30	136.50	145.10
Town clerk and custodian.	21.20	33.80	50.70	27.20
Other	1.80	10.50	13.90	5.60
Total cash costs	177.90	175.60	201.10	177.90
Estimated costs:				
Voting-machine charge		50.00	100.00	23.00
Rent*	33.20	42.00	71.00	38.10
Total estimated costs	33.20	92.00	171.00	61.10
Total costs	211.10	267.60	372.10	239.00
Number of districts	73	- 48	5	126

^{*}All rentals were included as estimated costs because the rent of the town hall for election purposes was estimated in many towns.

The cost per unit is a measure of the efficiency in providing a given service if the quality of the service does not vary. For elections, the cost per voter is a satisfactory measure of the cost per unit of service. In 1930, election costs averaged 87 cents per voter for all districts, \$2.31 per voter in districts which had fewer than 100 voters, and 48 cents in districts which had 500 or more voters (table 41). Thus, as the number of voters increased, the cost per voter declined sharply.

Voters per district D		Proportion which voters were of persons		Total cost		
Range	Average		of voting age	Per district	Per vote	
Number	Number	Number Per cent		Dollars	Dollars 2.31	
0 - 100 100 - 200	72 151	34	57 51	166 207	1.37	
200 - 200	252	42	51	235	0.93	
300 - 400	356	31	53	264	0.74	
400 - 500 500 - 600	440 533	13 4	57 53	280 258	0.64 0.48	
Total	276	126	53	239	0.87	

TABLE 41. RELATION OF THE NUMBER OF VOTERS PER DISTRICT TO THE COST OF Elections, 126 Election Districts, 1930

The cost per voter was 10 cents lower in the districts which used one machine than in those which used ballots, but it was highest in the districts which used two machines (table 42). The legal maximum number of voters allowed in the districts which used ballots, one machine, and two machines is 500, 700, and 1000 respectively. The number of voters, as a percentage of the legal maximum, was smaller in the districts with two machines than in the other districts.

TABLE 42. Relation of the Number of Voting Machines to the Cost of Voting. 126 Election Districts, 1930

Voting machines per district	Districts	Voters	Legal maximum	Number of voters as proportion	Total elect	
voling ingenines per district		district	number of voters	of legal maximum	Per district Dollars 211 268 372	Per votes
Number 0 1 2	Number 73 48 5	Number 232 330 389	Number 500 700 1000	Per cent 46.4 47.1 38.9	211 268	Cent. 91 81 96
Total		276			239	87

Since the county purchases ballots and supplies for election purposes, the comparison of voting costs between districts which used ballots and those which used machines is incomplete. The expenditures made by the county for ballots and supplies for districts without machines are considerably higher than for those which used machines. Furthermore, the discussion has not considered the differences in accuracy and convenience between districts using ballots and those using machines.

The cost of elections per voter declined as the population of the town increased. For towns with a population of less than 1000, this cost averaged \$1.07, but in those with a population of 1600 or more, this cost was 78 cents (table 43). Although not all the most populous towns were economically districted for voting, they were more efficiently organized for this function than the least populous ones.

Some towns among those studied were too small to obtain a low cost of election per voter, but a large number of others were divided into two or more districts where a smaller number would have sufficed. Furthermore,

Population		Towns	Proportion of popu- lation	Districts per	Machines per	Voters per	Cos elect	
Range	Average		voting	town	district	district	Per district	Per voter
Number 0 - 1000 1000 - 1600 1600 or more	Number 605 1,227 2,661	Number 26 22 23	Per cent 34.8 32.9 33.3	Number 1.1 1.5 2.8	Number 0.03 0.61 0.58	Number 189 269 319	Dollars 201 255 248	Dollar 1.07 0.95 0.78
Total	1,463	71	33.4	1.8	0.46	276	239	0.87

TABLE 43. Relation of Population per Town to the Cost of Elections, 71 Towns, 1930

many towns paid high wages to election officials. Inasmuch as the reorganization of election districts and the pay of election officials are within the control of the town board, a high cost of elections per voter resulting from inefficient organization or high payment of election officials could be readily corrected.

Assessment

The cost of assessment in towns which had \$5,000,000 or more of taxable property was more than four times as great as that in towns with less than \$500,000 of property (table 44). But, the cost of assessment per \$1000 full value of property in the poorest towns was approximately seven times the cost in the wealthiest towns. The assessors spent four times as many days assessing in the wealthiest towns, but they assessed more than seven times as much property each day. The assessors' wages per day increased as the wealth of the towns increased (table 44).

TABLE 44.	RELATION	OF	TAXABLE	WEALTH	PER	Town	TO	THE	Cost	OF	Assess-
			MENT.	71 Town	s. 19	30					

Taxable wealth per town			Cost of assessment		Days worked	Wages	Taxable
Range	Average	Towns	Per town	Per \$1000 taxable wealth	by the 3 assessors	of assessors per day	wealth assessed per day
Thousands of dollars		Number	Dollars	Cents	Number	Dollars	Dollars
Less than 500	332	11	181	54.5	41.9	4.07	7,910
500 - 1000	754	17	247	32.7	55.2	4.33	13,650
1000 - 2000	1,511	10	365	24.2	78.2	4.39	19,320
2000 - 3000	2,504	17	474	18.9	97.2	4.67	25,760
3000 - 5000	3,821	12	583	15.3	111.2	5.01	34,340
5000 or more	9,732	. 4	794	8.2	169.8	4.48	57,330
Total	2,238	71	395	17.7	82.4	5.59	27,170

Health

Although the compensation of the health officer is fixed legally, at not less than 15 cents per person, the actual amount received averaged 12.9 cents per capita (table 45). In a few instances, the lower fee resulted from an agreement whereby the health officers consented to receive a smaller salary. In most instances, it resulted from the use of an earlier census, after which the population of the town increased. There was no marked

tendency for the towns with large populations to obtain a health officer for a lower fee (table 45). The other expenditures for health are variable and show no apparent relation to population.

TABLE 45. Relation of Population to Health Expense, 71 Towns, 1930

Population	Population Health		Health expense per 100 residents			
Range	Average	Towns	expense per town	Health officer's salary	Other expendi- tures	,Total
Number	Number	Number	Dollars	Dollars	Dollars	Dollars
0 - 1000	605 1.227	26 22	100.30 245.20	13.49	3.10 5.92	16.59 19.99
1000 - 1600 1600 or more	2,661	23	413.70	12.25	3.30	15.55
Total	1,463	71	246.70	12.91	3.95	16.86

Protection

That part of the cost of protection which was for the compensation and expenses of the constables and justices of the peace increased rapidly as the population of the town increased. In the most populous towns, it was approximately eight times that in the least populous ones. It approximately doubled when expressed per capita (table 46). The higher expense in the towns of greater population was the result of a greater number of law violations. In the towns with the largest population, the justices' cases per town were approximately ten times the number in the towns with least population; the cases per capita more than doubled (table 46).

TABLE 46. Relation of Population to the Expense for Justices and Consta-bles, 71 Towns, 1930

Population		Population		Towns	trices a	for jus- nd con- bles		e court ses	Active justices	Active con- stables
Range	Average		Per town	Per 100 persons	Per town	Per 1000 persons	per town	per town		
Number 0 = 1000 1000 = 1600 1600 or more	Number 605 1,227 2,661	Number 26 22 23	Dollars 38.30 96.60 300.10	Dollars 6.33 7.87 11.32	Number 3.5 11.7 35.7	Number 5.7 9.5 13.4	Number 1.0 1.7 2.2	Number 0.4 1.0 1.9		
Total	1,463	71	141.50	9.67	16.5	11.2	1.6	1.1		

Tax collection

The cash expenditures of the town for tax collection are a relatively small part of this cost. In 1930, the town expenditures for the collector's surety bond and for office supplies averaged \$48.90, or 12.5 per cent of collection costs, but the fees18 of the collector averaged \$342.30, or 87.5 per cent (table 47).

The tax collector generally receives the tax roll for collection some time

^{*}These fees were tabulated from the tax receipt books filed by the collecter with the county

Expense	Amount per town	Proportion of total
Collectors' fees Surety bond Office supplies	Dollars 342.30 45.50 3.40	Per cent 87.5 11.6 0.9
Total	391.20	100.0

TABLE 47. Total Cost of Tax Collection per Town, 71 Towns, 1930

during December, January, or February, depending upon the county. Upon all taxes collected during the first 30 days after he receives the tax roll, the collector may charge the taxpayer a fee of one per cent, and upon all taxes collected after that date and before he returns the tax roll to the county treasurer, he is entitled to a fee of 5 per cent. Usually the tax rolls are returned early in May. In 1930, the three counties other than Allegany were paying a 2-per-cent fee on the uncollected taxes returned to the county treasurer, but that fee has now been abolished in this State. In addition, the corporations in the county may pay their taxes to the county treasurer within the first 30 days after the collector receives the roll. Upon these taxes, the treasurer collects a fee of one per cent which is paid to the town tax collector. These fees constitute the total fees of the collector. Although the collector could have charged 5 per cent on all taxes collected 30 days after receiving the tax roll, his fees actually averaged 1.7 per cent for all such collections (table 48). His fees during the first thirty days were approximately one per cent of collections. His total fees averaged 1.2 per cent of the total tax roll.

TABLE 48. Disposition of the Tax Roll and Its Relation to the Collectors' Fees, 71 Towns, 1930

Disposition of tax roll	Proportion of roll	Legal fee	Actual fee
Collected by collector, first 30 days	30.0 6.0	Per cent 1.0 5.0 2.0* 1.0	Per cent 1.0 1.7 1.0 1.0
Total		_	1.2

In 1933 the Legislature abolished this fee.

Because taxes are collected under a fee system, an increase in the size of the tax roll increases the tax collector's fee per town (table 49). The fees as a percentage of the taxes collected by the collector showed no persistent trend as the tax roll increased. A fee system makes it difficult to get a job done at a lower unit cost even if the number of units of work to be done is large.

Town compensation of certain officials

The total compensation paid by the town to the supervisor, the town clerk, the assessors, and the justices of the peace, is the sum of the amounts that these officials receive for the various services that they perform.

TABLE 49. RELATION OF THE AMOUNT OF THE TAX ROLL TO TAX COLLECTORS' FEES, 71 Towns, 1930

A of two sell		Amount of tax roll Proportion		Tax collectors' fees			
Range	Average	Towns	Proportion of tax roll collected by collector	Per town	As proportion of tax roll	As proportion of taxes collected by collector	
Dollars Less than 10000 10000 - 20000 20000 - 30000 30000 - 40000 40000 - 60000 60000 - 100000	Dollars 7,796 14,788 25,232 35,047 48,168 77,890	Number 8 21 18 11 9	Per cent 81.6 74.4 67.8 62.3 78.5 81.4	Dollars 96 173 329 420 581 1,032	Per cent 1.2 1.2 1.3 1.2 1.3 1.2 1.3	Per cent 1.5 1.6 1.9 1.9 1.5 1.6	
Total	27,573	71	72.7	342	1.2	1.7	

The pay of the supervisor as a town official averaged \$433.80, of which his highway salary was 38.5 per cent; the school-fund fee 35.6 per cent, the general-fund fee 13.9 per cent, and compensation for town board meetings 7.6 per cent (table 50). The other remuneration was relatively unimportant. The supervisors' compensation for town services ranged from \$116 to \$960 in the towns studied. The supervisor in more than one-half of the towns received from \$200 to \$500 as his pay for town duties.

TABLE 50. Town Compensation of Supervisor per Town, 71 Towns, 1930

Expense	Amount per town	Proportion of total
	Dollars	Per cent
Highway	167.10	38.5
Administration, school fee	154.50	35.6
dministration, general-fund fee.	60.40	13.9
Administration, board meetings	32.80	7.6
Administration, other	12.80	3.0
lealth, board of health	3.40	0.8
Protection, jury list	2.80	0.6
Total	433.80	100.0

The compensation of the town clerk in the towns studied was received for election services, highway duties, service on the town board, recording of vital statistics, and for other general administrative duties (table 51). The compensation of the town clerk ranged from \$52 to \$548. In 39 of the 71 towns, he received from \$100 to \$200.

TABLE 51. Compensation of Town Clerk per Town, 71 Towns, 1930

Expense	Amount per town	Proportion of total
	Dollars	Per ceni
Election	38.10	21.8
Highway	35.30	20.2
Administration, town board,	33.00	18.9
I ITAL STATISTICS	31.95	18.3
Administration, other	22.40	12.8
Tax collection	7.30	4.2
Protection, jury list	6.50	3.7
Health, board of health	0.25	0.1
Total	174.80	100.0

Of the average total remuneration of \$390.40 paid the three assessors by the town, \$377.70, or 96.7 per cent, was for assessing and \$12.70, or 3.3

per cent, for preparing the jury list.

The compensation received from the town by the four justices of the peace averaged \$196.70. More than two-thirds of this was for general administrative duties and the remainder was for judicial functions.

SUMMARY OF THE VARIATIONS IN THE TOTAL COST OF TOWN GOVERNMENT

In the analysis of town highways, it was indicated that, in general, towns with the greater volume of highway work were doing this work more efficiently. The greater volume of highway work resulted from larger mileages and more work per mile of highway. Therefore, any changes which increase highway mileage and the amount of work to be done on a mile of town highway should tend to decrease the cost of performing a designated unit of highway work.

Likewise, the analysis of general town costs indicates that increases in the population of towns decrease the cost per capita of important services. Decreases in the cost of performing certain definite services of a comparable nature were definitely associated with increases in population. Thus, changes in governmental organization which increase the population of towns without greatly affecting their wealth per capita would be expected to decrease the cost of providing most general governmental services of a comparable nature.

VARIATIONS IN TAX RATES

The taxpayer in discussing differences in the cost of government seldom does more than compare property-tax rates. But, the cost of government is not necessarily indicated by the property-tax rate. What, if any, is the relationship between the cost of town government and its property-tax rate? If the town budget balances, the town property taxes are equal to town expenditures less the income from sources other than property. When these taxes are spread over the taxable wealth of the town, the town tax rate results. But, in any one year, income, including property taxes, may be more or less than expenditures. Also, town expenditures in any one year may be greatly different from the true annual cost of government. Expenditures, however, will be practically the same as the cost of government when they are considered over a long period of time.

Taxable wealth per town varies widely. So does income from sources other than property. The variations in these two factors tend to obscure

the relationship between governmental costs and taxes.

In addition, the cost of town government is itself complex. It consists of specific quantities of various services and materials at a variable cost per unit. In other words, it is made up of hours of labor at a wage rate per hour, gallons of gasoline at a price per gallon and a multitude of other costs.

The quantity and the quality of the services provided by the town governments may vary widely among towns. And the cost of each unit of service may be equally as variable because of differences in the quality of the services rendered or in the efficiency of the town providing them.

GENERAL FUND

Taxable wealth, cost of government, and income other than property taxes affect tax rates. Of these three factors, variations in taxable wealth cause the greatest fluctuation in tax rates. But, in order to explain the variations in tax rates associated with changes in taxable wealth, the variation in the two other factors must be considered.

Cost of town general government

The town general expenditures varied widely among the towns studied. As the wealth per town increased, these costs per town and per square mile increased rapidly (table 52).

TABLE 52. RELATION OF TAXABLE WEALTH PER TOWN TO THE TOWN GENERAL-GOVERNMENT EXPENDITURES, 71 TOWNS, 1930

Taxable wealth per town			ļ	Town general	expenditure	3
Range	Average	Towns	Per town	Per square mile	Per capita	Per \$1000 taxable wealth
Thousands of	dollars	Number	Dollars	Dollars	Dollars	Dollars
Less than 500 i	332	- 11	1.740	54	3.82	5.25
500 - 1000	754	17	2,453	67	3.15	3.25
1000 - 2000	1.511	10	4.126	123	3.31	2.73
2000 - 3000	12.504	17	4.612	125	2.60	1.84
3000 ~ 5000	3.821	12	8.575	182	4.26	2.24
5000 or more]	9,732	4	11,945	350	2.54	1.23
Total	2,238	71	4,665	125	3.19	2.08

Other income

The general-fund income from sources other than property taxes influences the property-tax rate. Among towns with similar taxable wealth and the same cost of government, any town, which receives a large share of its revenues from sources other than the property tax can enjoy a proportionately lower tax rate than can the town which receives less of its revenue from such sources.

The income other than property taxes for the general fund averaged \$3386, or 72.6 per cent, of the general-fund expenditures. It was equal to a tax rate of \$1.51 on the taxable wealth of the towns and provided \$2.31 per capita to pay for governmental costs. But, the amount of this income received by towns varied widely. In the towns with least taxable wealth, these other sources of income provided only 33.4 per cent of general fund income, but in the most wealthy towns 152.2 per cent (table 53). These wealthiest towns could pay all general-fund expenditures from income other than property taxes, and have one-half that amount to aid in paying highway costs.

General-fund tax rates

The influence of taxable wealth on tax rates is somewhat obscured by variations in costs and in income other than property taxes. For the 71 towns studied, general-fund taxes averaged \$2.05 per capita (table 54).

Taxable wealth per town			General-fund income other than property tax						
Range	Average	Towns	Per town	Per square mile	Per capita	Per \$1000 taxable wealth	As proportion of general costs		
Thousands of de	llars	Number	Dollars	Dollars	Dollars	Dollars	Per cent		
Less than 500	332	11	581	18.00	1.27	1.75	33.4		
500 - 1000	754	17	1,327	36.40	1.70	1.76	54.1		
1000 2000	1,511	10	2,168	64.60	1.74	1.44	52.6		
2000 - 3000	2,504	17	3,333	90.10	1.88	1.33	72.3		
3000 - 5000	3,821	12	5,039	106.60	2.50	1.32	58.8		
5000 or more	9,732	4	18,167	531.60	3.86	1.87	152.1		
Total	2 238	71	3,386	91.00	2.31	1.51	72.6		

TABLE 53. Relation of Taxable Wealth per Town to the General-Fund Income other than Property Taxes, 71 Towns, 1930

They ranged from \$4.57 per capita in the least wealthy towns to 97 cents in the wealthiest towns. But, if each group of towns had raised \$2 per capita in taxes, the tax rate would have varied from \$2.75 in the towns with least wealth to 97 cents in the towns with the highest full value of taxable property. This variation is less than the actual variation because taxes per capita were greater in the towns of low wealth.

TABLE 54. Relation of Taxable Wealth to the Tax Rate Needed to Raise Specified Taxes for General-Fund Purposes, 71 Towns, 1930

Taxable wealth per town		Towns	Taxes	Tax rate to raise \$2 taxes	Tax rate	Taxes per	Tax rate to raise \$100 per	Tax rate as pro- portion
Range	Average	.0	capita	per capita	portion of average	square mile	square mile	of aver-
Thousands of d	ollars	Number	Dollars	Dollars	Per cent	Dollars	Dollars	Per cent
Less than 500	332	11	4.57	2.75	209.9	64.60	9.73	586.1
500 - 1000	754	17	3.42	2.07	158.0	73.10	4.83	291.0
1000 - 2000	1,511	10	2.97	1.65	126.0	110.20	2.22	133.7
2000 - 3000	2,504	17	1.07	1.45	108.4	51.20	1.48	89.2
3000 - 5000	3,821	12	2.85	1.05	80.2	121.50	1.24	74.7
5000 or more	9,732	4	0.37	0.97	74.0	51.20	0.35	21.1
Total Average	2,238	71	2.05	1.31	100.0	80.70	1.66	100.0

The amount of taxes per square mile as levied by the towns varied widely. The average was \$80.70 for general-fund purposes (table 54). If each town had levied taxes amounting to \$100 per square mile, the tax rate in the least wealthy towns would have been \$9.73 per \$1000 full value, or 586 per cent of the average tax rate required, and only 35 cents, or 21 per cent of the average, in the most wealthy towns (table 54).

Variations in wealth, in income other than property taxes, and in the cost of government, affect tax rates. The general-fund tax rate among towns is a result of the influence of all three factors. In 1930, this tax rate in the 11 towns with least wealth was \$6.29, or 469 per cent of the average for all towns (table 55). In the wealthiest towns it was 18 cents, or 13 per cent of the average.

TABLE 55. RELATION OF TAXABLE WEALTH PER TOWN TO THE GENERAL-FUND PROPERTY-TAX RATE, 71 Towns, 1930

Taxable wealth	per town		Ger	General-	Tax rate		
Range	Average	Towns	Per town	Per capita	Per square mile	fund tax rate	as pro- portion of average
Thousands of	dollars	Number	Dollars	Dollars	Dollars	Dollars	Per cent
Less than 500	332	11	2,084	4.57	64.60	6.29	469.4
500 - 1000	754	17	2,664	3.42	73.10	3.53	262.7
1000 - 2000	1.511	10	3,700	2.97	110.20	2.45	182.8
2000 - 3000	2.504	17	1,893 -	1.07	51.20	.76	56.7
3000 - 5000	3.821	12	5,742	2.85	121.50	1.50	111.9
5000 or more	9,732	4	1,750	.37	51.20	.18	13.4
Total		71	3,004	2.05	80.70	1.34	100.0

HIGHWAY FUND

Likewise, the highway tax rates are affected by the cost of highways, other highway income, and taxable wealth.

Cost of highways

Highway expenditures per town and per mile of highway increased rapidly with increases in the taxable wealth of the town. These expenditures increased from \$106 to \$420 per mile of town highway as the average taxable wealth rose from \$332,000 to \$9,732,000 (table 56).

TABLE 56. RELATION OF TAXABLE WEALTH PER TOWN TO THE EXPENDITURES FOR Town Highways, 71 Towns, 1930

Taxable wealth p	er town	#	Cost of town highways		
Range	Average	Towns	Per town	Per mile of town	
Thousands of a	loliars	Number	Dollars	Dollars	
Less than 500	332	11	5,957	106	
500 - 1000	754	17	8,008	121	
1000 - 2000	1,511	10	10,429	194	
2000 ~ 3000	2,504	17	14.423	248	
3000 - 5000	3,821	12	21,773	289	
5000 or more	9,732	- 4	19,257	420	
Total	,	71		7	
Lverage	2,238		12,528	204	

Other highway income

Besides property taxes, income with which to pay highway costs was obtained from state aid for town highways, machinery rentals and interest. Approximately one-fourth of the income needed to pay town-highway costs in 1930 was obtained from sources other than property taxes (table 57).

As the wealth of the towns increased, revenues from sources other than property taxes declined slightly as a percentage of highway expenditures. In 1930, the least wealthy towns received 29.7 per cent of the highway revenues from these sources, and the most wealthy towns 25.7 per cent (table 57). These sources, however, provided more income per town and per mile of town highways as the taxable wealth per town increased.

TABLE 57. Relation of Taxable Wealth to the Highway Revenues other than Property Taxes, 71 Towns, 1930

Taxable wealth per town			Highway revenues other than property		
Range	Average	Towns	Per town	Per mile of town high- ways	As propor- tion of high- way costs
Thousands of dollars		Number	Dollars	Dollars	Per cent
Less than 500	332	11	1,769	31.60	29.7
500 - 1000	754	17	2,200	33.19	27.5
1000 - 2000	1,511	10	2,188	40.66	21.0
2000 - 3000	2,504	17	3,268	56.10	22.7
3000 - 5000	3,821	12	5,470	72.70	25.1
5000 or more	9,732	4	4,945	108.00	25.7
Total		71	3,094	50.40	24.7

Taxable wealth

The effect of taxable wealth on highway tax rates can be shown by computing the tax rate necessary to raise \$100 per mile of town highways in the towns with different amounts of taxable wealth. To raise \$100 per mile for highway purposes, the eleven towns with an average of \$332,000 of taxable wealth would have needed to levy a tax of \$16.89 per \$1000 full value (table 58). As the wealth of towns increased, the required tax rate declined. Thus, in towns with an average of \$9,732,000 of taxable wealth, this tax rate amounted to 47 cents for each \$100 of highway taxes per mile. The average rate needed was \$2.74.

TABLE 58. Relation Between Taxable Wealth per Town and Tax Rate Necessary to Raise \$100 Taxes per Mile of Town Highways, 71 Towns, 1930

Taxable wealth per town			Bridge, machinery, and miscellaneous funds		
Range	Average	Towns	Taxes per mile of town highway	Tax rate to raise \$100 taxes per mile	Tax rate as proportion of average
Thousands of dollars		Number	Dollars	Dollars	Per cent
Less than 500	332	11	29.10	16.89	616.4
500 - 1000	754	17	38.20	8.79	320.8
1000 - 2000	1.511	io	60.30	3.52	128.5
2000 - 3000	2.504	17	99.50	2.34	85.4
3000 - 5000	3.821	12	86.50	1.97	71.9
5000 or more	9,732	4	218.90	0.47	17.2
Total		71			
Average	2,238	l	71.20	2.74	100.0

Highway-tax rates

The actual tax rates for the highway funds varied less than these theoretical rates because the wealthiest towns levied more taxes per mile of town highways than did the poorest towns.

The highway tax rate is affected by highway costs, by the proportion of these costs paid by income other than property taxes, and by the amount of taxable wealth in the town. Three highly variable factors, therefore, determine the tax rate for highway purposes.

The tax rate for highway purposes is composed of the rates for the four

highway funds, highway repair and improvement, bridge, machinery, and miscellaneous. This tax rate in the 11 towns with least taxable wealth averaged \$9.60, or 220 per cent of the average for all towns (table 59). As the wealth per town increased, the tax rate declined. Hence, in the 4 most wealthy towns, the taxes for highway purposes were \$2.23 per \$1000 full value of taxable property, or 51 per cent of the average. Despite the decrease in tax rates, highway taxes expressed as a total or per mile of highways increased as the wealth per town increased.

TABLE 59. RELATION OF TAXABLE WEALTH PER TOWN TO THE TOTAL HIGHWAY-TAX RATES, 71 TOWNS, 1930

Taxable wealth per town		Towns Total highway taxes		Total highway-tax	Tax rate	
Rarige	Average	104115	Per town	Per mile	rate	tion of average
Thousands of	dollars	Number	Dollars	Dollars	Dollars	Per cent
Less than 500	332	11	3,184	56.90	9.60	220.2
500 1000	754	17	5,240	79.10	7.07	162.2
1000 - 2000	1,511	10	6,310	118.50	4.75	108.9
2000 - 3000	2,504	17	10,726	183.00	5.09	116.7
3000 - 5000	3,821	12	12,960	172.20	3.76	86.2
5000 or more	9,732	4	16,076	351.00	2.23	51.1
Total		71				
Average	2,238		8,301	135.30	4.36	100.0

TOTAL COST OF TOWN GOVERNMENT

One of the three factors affecting the town tax rate is the cost of government. This varied considerably among the towns with different amounts of taxable property. Increases in taxable wealth per town were associated with increases in the total cost of town government per town, per square mile, and per mile of town highways. When the wealth per town increased from \$332,000 to \$9,732,000, the cost of government rose from \$7697 to \$31,202 per town; from \$239 to \$913 per square mile; and from \$137 to \$681 per mile of highways (table 60).

TABLE 60. Relation of Taxable Wealth per Town to the Total Cost of Town Government, 71 Towns, 1930

Taxable wealth per town			Total costs of town government				
Range	Average	Towns	Per town	Per capita	Per square mile	Per mile of town highway	
Thousands of	ioliars	Number	Dollars	Dollars	Dollars	Dollars	
Less than 500	332	11	7.697	16.88	239	137	
500 ~ 1000	754	17	10.461	13.42	287	158	
1000 = 2000	1.511	10	14.555	11.68	433	270	
2000 - 3000	2.504	17	19.036	10.72	515	327	
3000 - 5000	3.821	1 12	30.348	15.06	642	403	
5000 or more	9,732	4	31,202	6.62	913	681	
Total		71					
Average	2,238		17,192	11.75	462	280	

TOTAL TOWN TAX RATES

No single factor accounts for so much of the variation in tax rates as taxable wealth. The effect of wealth on tax rates is obscured by the increased taxes per town, per square mile, and per mile of highways, as levied in the wealthy towns. The tax rate necessary to raise \$10 per capita ranged from \$13.80 in the least wealthy towns to \$4.80 in the most wealthy towns (table 61). The variation in the tax rate necessary to raise \$100 taxes per square mile was even more variable. As the taxable wealth per town increased from \$332,000 to \$9,732,000, the tax rate necessary to raise this amount of taxes declined from \$9.73 to 35 cents, or from 586 per cent to 21 per cent of the average. With the same increase in taxable wealth, the tax rate required to raise \$100 per mile of highways for highway-repair and improvement-fund purposes declined from \$16.89 to 91 cents; and that for the bridge, machinery, and miscellaneous funds from \$16.89 to 47 cents.

TABLE 61. Relation of Taxable Wealth to the Tax Rate Needed to Raise \$10 per Capita, \$100 per Square Mile, and \$100 per Mile of Town Highway, 71 Towns, 1930

Taxable wealth per town		axable wealth per town		Tax rate to	Tax rate to raise \$100 pe mile of town highway	
Range	Average	Towns	Tax rate to raise \$10 per capita	raise \$100 per square mile	Repair and improvement fund*	Bridge, ma chinery, and miscella- neous funds
Thousands of	dollars	Number	Dollars	Dollars	Dollars	Dollars
Less than 500	332	11	13.80	9.73	16.89	16.89
500 - 1000	754	17	10.40	4.83	9.08	8.79
1000 - 2000	1,511	10	8.20	2.22	4.52	3.52
2000 ~ 3000	2,504	17	7.10	1.48	3.30	2.34
3000 - 5000	3.821	12	5.20	1.24	2.40	1.97
5000 or more	9,732	4	4.80	0.35	0.91	0.47
Total		71				
Average	2,238		6.60	1.66	3.76	2.74

^{*}The repair and improvement fund is levied only on property outside incorporated villages.

Tax rates for all town purposes varied widely among the towns studied. The total tax rate averaged \$5.70 per \$1000 full value of taxable property, but in the 11 least wealthy towns it was \$15.89, or approximately three times the average (table 62). As the taxable wealth per town became larger, the tax rate declined. Thus, in the 4 wealthiest towns, it was \$2.41, or 42.3 per cent of the average for all towns.

Three factors determine property-tax rates; these are: the cost of govern-

TABLE 62. Relation of Taxable Wealth per Town to the Tax Rate for all Town Funds, 71 Towns, 1930

Taxable wealth per town		nable wealth per town Towns	Total taxes	Total taxes	Total town	Tax rate as proportion
Range	Average	10720	per town	per capita	tax rate	of average
Thousands of	dollars	Number	Dollars	Dollars	Dollars	Per ceni
Less than 500	332	11	5,268	11.56	15.89	278.8
500 - 1000	754	17	7.903	10.14	10.60	186.0
1000 ~ 2000	1,511	10	10.010	8.03	7.20	126.3
2000 - 3000	2.504	17	12.619	7.11	5.85	102.6
3000 - 5000	3.821	12	18.792	9.28	5.26	92.3
5000 or more	9,732	4	17,826	3.78	2.41	42.3
Total		71				
Average	2,238		11.305	7.72	5.70	109.0

ment, income other than property taxes, and taxable wealth. All three factors vary greatly. Therefore, a comparison of the cost of government based on tax rates, alone, is likely to be misleading.

POSSIBILITY OF CHANGING TOWN TAX RATES-A SUMMARY

Three factors affect town property-tax rates: cost of government, income from other sources, and tax base or taxable wealth, over which the cost of government is spread. A change in any one of these factors affects the tax rate.

CHANGES IN THE COST OF GOVERNMENT

If the taxable wealth and the proportion of the cost of government paid from other income remain unchanged, changes in the cost of government produce like changes in tax rates.

Services

The cost of government can be affected by changes in the number, amount, and quality of the services provided by the town. These vary. For example, highway expenditures constitute a large part of the cost of town government, and more money is now being spent per mile than formerly, even after differences due to the price level have been eliminated. Such increases raise tax rates unless the other factors affecting them change. Insofar as the town is required to aid libraries, hospitals, and other special services, the cost of government is increased. If the towns-people demand more and better services and the town provides them, the resulting increase in the cost of government will be reflected in tax rates.

On the other hand, decreasing the services provided by towns may be accomplished by shifting town functions to the county or to the State. For example, the maintenance of all highways was once a town function, but now the town maintains only the town highways. At present, much of the welfare function is being shifted from the towns to the county and even to the State. Insofar as such functions now performed by towns are shifted to the larger unit, the cost of town-government services and the tax rate for town purposes will be reduced.

But whether the reduction in town tax rates will be entirely counteracted by an increase in other property-tax rates depends on the relative costs of providing the same service by the different units, and the sources of income for the unit to which the function was shifted. functions shifted to the State is paid entirely from income other than the property tax, but those shifted to the county are largely paid by the property tax. Thus, when functions are shifted to the county, the county property tax is increased for all towns, but the rate in the least wealthy towns is likely to be lower than the town tax it replaces. On the other hand, the county tax would probably be higher than the replaced town tax in the most wealthy towns,

Too often, functions or parts of functions are not shifted entirely to a larger unit of government; but, in part, are duplicated by the larger unit. For example, the functions of the state police, the county sheriff and his deputies, and the town constables overlap. The county and State also have taken over so much of the highway mileage in some towns as to make that mileage too small to be most efficiently maintained.

Efficiency 1 3 2

The cost of government can be affected by a change in the cost of performing a unit of service. It is the purpose of this and similar studies to determine some of the reasons for variations in costs. This study has shown that the number of voters influences the cost of elections per voter, and that some towns are too small to obtain low costs per voter. It indicated that increases in the highway work to be done, either through increased mileage or by more intensive work on fewer miles, tend to decrease the cost per unit of highway work. It has pointed out also that less of the general costs are for administration in those towns having largest expenditures for general government. These facts disclose the direction in which lower costs per unit lie.

CHANGES IN INCOME OTHER THAN PROPERTY TAXES

Changes in income other than property taxes cause changes in tax rates. The principal sources of income other than property taxes are the state aid for town highways and the state-shared revenues. Others are machinery rentals, dog licenses, mortgage taxes, rents, fines and licenses, and interest income.

State aid for town highways

In 1931, a new method of granting state aid for town highways went into effect. Prior to that time the wealthiest towns had received the most state aid per mile of town highways and the poorest towns the least (table 63). In 1931, this relationship was reversed.

TABLE 63. RELATION OF TAXABLE WEALTH PER MILE OF TOWN HIGHWAYS TO STATE AID PER MILE OF TOWN HIGHWAYS, 71 TOWNS, 1930 AND 1931

axable wealth per mile of town highways		Towns	State aid per mile		1931 as proportion
Range	Average		1930	1931	of 1930
Dollars	Dollars	Number	Dollars	Dollars	Per cent
Less than 10,000	6,600	17	29	85	290
10,000 - 20,000	13,400	11	28	64	226
20,000 - 40,000	30,200	18	31	53	176
40.000 - 60,000	48,600	11	38	51	134
60.000 - 100.000	70.000	10	46	53	116
100,000 or more	212,500	4	60	51	84
Total		71			
Average	36,500		34	63	185

The present method of distributing state aid has decreased highway taxes in those towns with low wealth per mile of town highways. Tax rates, however, are far from being equalized among towns of different wealth per mile. Further changes in state aid might be toward equalizing the tax rates for the bridge, machinery, and miscellaneous funds.

State-shared revenues

The state-shared revenues are general-fund income. They are from the personal income, business franchise and bank taxes. One-fourth of the present income tax, one-third of the business-franchise tax, and all of the bank tax, are returned to the local units of government.

The income that towns receive from state-shared revenues varies from year to year because of differences in the yields of these taxes. The yields vary because these taxes are levied on net income, the most variable of tax bases. Hence, in periods of depression, town income from stateshared revenues is relatively small because incomes dwindle, and, in periods of prosperity, it is relatively large because incomes are large.

At present, the income tax is returned to towns on the basis of assessed value, and the other two state-shared taxes are returned on the basis of the location of the property of the corporation which paid the tax. As shown previously, this method of distribution has resulted in the payment of a larger proportion of the cost of general government in the wealthy towns,

as compared to the less wealthy ones.

In many towns, taxable property is assessed at a smaller percentage of full value than the average for the State. These towns can increase their receipts from the income tax by more nearly assessing their property at full value. If all property were assessed at full value, the receipts from the income tax would be reduced in those towns, the assessed value of which is a higher percentage of full value than the average for the State. On the other hand, receipts would be increased in those towns, the assessed value of which is now below the average.

Miscellaneous income

Changes in miscellaneous income other than property taxes are relatively unimportant. Only the excess of rentals from machinery above its cost of operation is true income for the town. Increases in such income could not be large. Dog licenses, mortgage taxes, building rents, and interest income are relatively minor sources of town income. Important increases in town income are not to be expected from these sources.

Some new taxes have been levied during the depression, and the rates of others have been increased. The retail sales tax is new, and increases have been made in the income and gasoline taxes. It is possible that some of these changes in taxation will be permanent and that part of the revenues received from them will be shared with local units or distributed as state aid. Any such increases in income would affect property taxes.

CHANGES IN THE TAX BASE

Among the three factors affecting tax rates, taxable wealth is the most variable and is responsible for most of the extreme variations in tax rates.

The inclusion of personal property as well as real property in the tax base would widen it. But the trend has been in the opposite direction. The assessment of personal property has always been difficult. Furthermore, the taxes on incomes are expected to attain part of the same objective, that is, the taxation of personal property and intangible wealth, in a more effective manner. In 1930, all personal property above a \$1250 exemption per person was legally subject to assessment, but in practice the most of it was not assessed. In the towns studied, the value of the personal property assessed was only 0.4 per cent of the full value of real property. The assessment of personal property for taxation was abolished by the 1933 Legislature, apparently a formal recognition of the failure to assess personal property.

A change in the unit of levy would affect tax rates If the town taxes were spread evenly over the taxable wealth of a county, tax rates would be lowered decidedly in the low-wealth towns and probably raised somewhat in the wealthiest towns.

The actual tax rate for all town purposes averaged \$5.70, but ranged from \$15.89 to \$2.41 among the towns grouped as to wealth (table 64). If the town taxes in each county had been levied as a county tax, the variation in the present town tax rates within any given county would have been eliminated. However, because of the necessity for a somewhat higher tax rate in the counties with a preponderance of towns with little wealth, the total tax rate for town purposes would have declined from \$6.47 to \$5.27 as the wealth of the towns increased.

TABLE 64. Relation of Taxable Wealth to the Actual Tax Rates, and the Tax Rate Computed on a County Basis, 71 Towns, 1930

Taxable wealth per town			Actual tax	Tax rate on a	Tax rate on county basis
Range	Average	Towns	rates	county basis	as propor- tion of ac- tual rate
Thousands of dollars		Number	Dollars	Dollars	Per cent
Less than 500	332	11	15.89	6.47	40.7
500 - 1000	754	17	10.60	6.34	59.8
1000 ~ 2000	1,511	10	7.20	5.66	78.6
2000 - 3000	2,504	17	5.85	6.00	102.6
3000 - 5000	3,821	12	5.26	5.49	104.4
5000 or more	9,732	4	2.41	5.27	218.7
Total		71	5.70	5.70	100.0

A larger unit of levy could be obtained in several different ways. The shift of town functions to the county is a step in this direction. Aside from the question of increased or decreased efficiency, consolidation of towns of dissimilar wealth and tax rates would result in a larger taxing unit and equalization of tax rates for the areas included.

In considering the effects of a change in governmental organization or administration it is necessary to distinguish between the resulting influence upon tax rates and upon efficiency. A town, with a small amount of taxable property resulting in a high tax rate, might benefit from consolidation with towns of more wealth, even assuming no change in efficiency. The relative amount of taxable wealth is such an important factor influencing tax rates that it is likely to overshadow the influence of changes in efficiency.