
**FEDERAL AIDS TO LOCAL
PLANNING**

JUNE 1940

NATIONAL RESOURCES PLANNING BOARD

FEDERAL AIDS TO LOCAL PLANNING

June 30, 1940

NATIONAL RESOURCES
PLANNING BOARD

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FEDERAL AIDS TO LOCAL PLANNING

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NATIONAL RESOURCES PLANNING BOARD

THE ORGANIZATION AND PURPOSE OF THE REPORT

As a guide to the services and data available in the Federal Government for use in connection with local planning, and as an indication of those Federal activities which most vitally affect local planning, the National Resources Planning Board at the suggestion of its Local Planning Committee assembled these statements concerning 46 Federal Government agencies.

In its contacts with local planning commissions and similar bodies throughout the country, the Board found that few of these had made full use of Federal facilities. This fact is naturally reflected in the effectiveness of much of the present planning of local governmental activities. It is hoped that the dissemination of this study will result in a more complete utilization by local governments, as a regular procedure, of Federal aids to local planning.

At the same time, this study will present to Federal Government agencies a composite picture of those Federal activities which relate to local planning today.

The statements which compose this study are based, in most cases, on statements prepared for the Board by the agencies concerned. This information and the report were organized and prepared by Melville C. Branch, Jr., of the Board's Staff, in accordance with a general outline submitted to the agencies and was developed through personal conferences. In a number of instances, the statements have been prepared from background material provided to the Board.

The National Resources Planning Board very much appreciates the cooperation of the Federal Government agencies included in this study and the many individuals who have contributed in its preparation.

This circular consists of statements on 46 Federal agencies whose activities are most directly related to local government and planning. In most cases, the information is based on statements prepared by the agency concerned at the request of the Local Planning Com-

mittee of the National Resources Planning Board. For convenience in the use of the manual, every statement follows a uniform pattern.

Each statement begins with a brief description of the general functions of the Federal agency concerned. There follows a more detailed account of those activities of the agency which relate to and affect local government and planning most directly. In this analysis, a distinction has been made between activities affecting local planning and Federal assistance and aids available to local planning bodies. The Public Works Administration has expended some 4 billion dollars on non-Federal projects since 1933, and this program has vitally affected local government and local planning. On the other hand, the Work Projects Administration has provided extensive assistance in the form of workers' services on planning board projects, an aid to local planning agencies. Other agencies make available many types of technical assistance, not always to local planning bodies but to local governmental agencies planning particular phases of community activity.

The third part of the statement regarding each agency consists of a description of local planning data and information available from the Federal agency. This material is of varying character and includes published reports, statistics, surveys, educational and descriptive bulletins, circulars, procedural and technical material, laws and model bills, and even documentary films. An effort has been made to select for presentation in this document those items which would probably be of most value and interest to local planning and other governmental agencies.

To make the material more accessible, a subject index has been prepared which will insure easy reference to information in the document concerning any agency or topic relating to local planning. A special visual index has been added to afford rapid reference between agencies and the planning fields with which they are concerned.

VISUAL INDEX OF PRINCIPAL AGENCY ACTIVITIES

		NATURAL RESOURCES									
		LAND	WATER				MINERALS			WILDLIFE	FORESTS
			DRAINAGE	FLOOD CONTROL	IRRIGATION	POLLUTION QUALITY	FUELS	OTHER			
DEPARTMENT	SUB-DEPARTMENTAL AGENCIES										
AGRICULTURE	AGRICULTURAL ADJUSTMENT ADMINISTRATION	AC	●								
	BUREAU OF AGRICULTURAL ECONOMICS	RE & AC									
	EXTENSION SERVICE	AC	●								
	FARM CREDIT ADMINISTRATION	AC	●								
	FARM SECURITY ADMINISTRATION	AC	●								
	FOREST SERVICE	AC	●	●						●	●
	RURAL ELECTRIFICATION ADMINISTRATION	AC									
INTERIOR	SOIL CONSERVATION SERVICE	AC	●	●	●						●
	BUREAU OF BIOLOGICAL SURVEY *	AC								●	
	BUREAU OF FISHERIES *	AC								●	
	BUREAU OF MINES	RE					●	●	●		
	BUREAU OF RECLAMATION	AC	●			●					
	GENERAL LAND OFFICES *	AC	●			●		●	●		
	GEOLOGICAL SURVEY	RE	●	●			●	●	●		
	GRAZING SERVICE	AC	●							●	
	NATIONAL PARK SERVICE	AC									●
	OFFICE OF INDIAN AFFAIRS	AC	●			●					●
	PUERTO RICO RECONSTRUCTION ADMINISTRATION	AC	●	●							●
JUSTICE	BUREAU OF PRISONS	AC									
	FEDERAL BUREAU OF INVESTIGATION	AC									
COMMERCE	BUREAU OF FOREIGN AND DOMESTIC COMMERCE	RE									
	BUREAU OF THE CENSUS	RE		●		●					
LABOR	COAST AND GEODETIC SURVEY	RE									
	BUREAU OF LABOR STATISTICS	RE									
	CHILDREN'S BUREAU	RE									
WAR	WOMEN'S BUREAU	RE									
	U.S. CORPS OF ENGINEERS	AC			●			●			
FEDERAL LOAN AGENCY	FEDERAL HOME LOAN BANK BOARD	AC	●								
	FEDERAL HOUSING ADMINISTRATION	AC	●								
FEDERAL SECURITY AGENCY	NATIONAL YOUTH ADMINISTRATION	AC									
	OFFICE OF EDUCATION	RE									
	SOCIAL SECURITY BOARD	AC									
FEDERAL WORKS AGENCY	U.S. PUBLIC HEALTH SERVICE	AC						●			
	PUBLIC BUILDINGS ADMINISTRATION	AC	●								
	PUBLIC ROADS ADMINISTRATION	AC	●								
	PUBLIC WORKS ADMINISTRATION	AC		●							
	UNITED STATES HOUSING AUTHORITY	AC	●								
INDEPENDENT AGENCIES	WORK PROJECTS ADMINISTRATION	AC									
	CENTRAL HOUSING COMMITTEE	RE									
	CIVIL AERONAUTICS AUTHORITY **	RG									
	FEDERAL POWER ADMINISTRATION	RG							●		
	FOREIGN TRADE ZONES BOARD	AC									
	INTERSTATE COMMERCE COMMISSION	RG									
	TENNESSEE VALLEY AUTHORITY	AC	●	●	●		●		●	●	●
EXECUTIVE OFFICE OF THE PRESIDENT	VETERANS ADMINISTRATION	AC									
	NATIONAL RESOURCES PLANNING BOARD	RE									

AC-PRIMARILY AN ACTION AGENCY

RE-PRIMARILY A RESEARCH AGENCY

RG-PRIMARILY REGULATORY AGENCY

* AMALGAMATED AS OF JUNE 30, 1940 INTO THE FISH AND WILDLIFE SERVICE. SEE R.

** EFFECTIVE JUNE 30, 1940 THE FUNCTIONS OF THE OFFICE OF THE ADMINISTRATOR OF CIVIL AERONAUTICS WERE TRANSFERRED TO THE DEPARTMENT OF COMMERCE, THE OFFICE OF THE MEMBERS OF THE AIR SAFETY BOARD WERE ABOLISHED, AND THE CIVIL AERONAUTICS BOARD INTO WHICH WERE CONSOLIDATED THE FUNCTIONS OF THE AIR SAFETY BOARD, WAS CREATED AND PLACED WITHIN THE FRAMEWORK OF THE DEPARTMENT OF COMMERCE. SEE PAGE

[illegible]

STATISTICAL
AGENCY

BASIC MAP
B CHART DA-
TA AGENCY

STATISTICAL
AGENCY

CONCERNED
WITH ALL
PLANNING
FIELDS AS
'ADVISORY'
& RESEARCH
AGENCY

EXECUTIVE OFFICE OF THE PRESIDENT

NATIONAL RESOURCES PLANNING BOARD¹

Federal Employment Stabilization Act of 1931

Reorganization Act of 1939

Reorganization Plan No. 1, Public Resolution of June 7, 1939

Executive Order of the President (No. 8949) of Sept. 8, 1939

Executive Order of the President (No. 8455) of June 26, 1940

Brief General Statement of Agency Functions

The National Resources Planning Board, formerly the National Resources Committee, National Resources Board, and the National Planning Board, is a central advisory research and planning agency. In accordance with the President's Reorganization Plan No. 1, the Board is now established in the Executive Office of the President.

The Board has been engaged in three major lines of activity since its organization in 1933:

State and Regional Planning.—The Board has followed a policy of decentralization and, through its 9 regional offices and regional chairmen and counselors, has encouraged cooperation in planning among local, State, and Federal agencies. Consultants have been assigned to State planning agencies for a limited number of days per month to provide technical advice on planning studies; 45 drainage basin committees, composed of representatives of Federal and State agencies, as well as the general public, which are concerned with the conservation and development of water resources, have been organized. Areal studies have been undertaken in such regions as the Upper Rio Grande Basin, the Pacific Northwest, the Pecos Basin, the Northern Great Plains, the Southern Forest Region, and the Northern Lakes States Cut-over Area which have led to recommendations for public action aimed at the solution of problems and the development of these areas. The Board has operated a Federal project coordinating special efforts now in progress in an inventory of publicly owned lands, and, through its Public Works Committee, has operated demonstration projects concerned with the programming of public works.

National Resources Planning Activities.—These include the preparation of studies, plans, and reports, relating to the conservation of the national resources and coordinated action in their development, which bring together materials and experience and outline

possible lines of policy for consideration by the Congress and the President. To this end, the Board has set up a series of technical committees acting under its general direction.

Long-Range Studies.—These have been requested from time to time by the President. The Board has outlined in its various reports a number of fields in which further planning effort seems to be needed.

Activities Affecting and Assistance to Local Planning

The activities of the various technical committees and the general studies and publications of the Board affect and constitute vital background for local planning and, in some instances, are directly related to the interests and concerns of local planning bodies. A list of the published reports and studies by the various committees is included at the end of this volume.

Through the activities of the regional offices and those with the State planning boards, the National Resources Planning Board indirectly but definitely co-operates with local planning. Nine regional offices are maintained, located at Boston, Mass.; Baltimore, Md.; Atlanta, Ga.; Indianapolis, Ind.; Dallas, Tex.; Omaha, Nebr.; Denver, Colo.; San Francisco, Calif.; and Portland, Oreg. From these centers the entire country is covered and a close liaison effected with the 43 State planning boards, county and municipal planning bodies, and with private planning agencies.

Activities of the Regional Offices

Activities of the field staff develop in seven main directions: (1) Stimulation and encouragement of State and local planning; (2) provision of the Board's technical consultants to regional, State, and local planning agencies; (3) interrelating planning activity between planning agencies; (4) sponsorship of drainage basin committees for water resources planning; (5) collaboration with special committees on regional studies within their areal divisions; (6) acting as a clearing house for information; and (7) carrying on field operations required by the Board's program.

¹ This description of the functions and activities of the Board is based on its work prior to June 30, 1940. For a statement of its present functions and activities see page 5.

Cooperation with activities of State and local planning has been accomplished through various means. Staff members have led discussions on planning before planning and civic associations, technical societies, university seminars, planning and civic commissioners, city councils, and groups of State administrative officials, and have made numerous radio talks on the purpose and methods of planning. Assistance has been supplied to State planning boards and university extension workers in conducting "education for planning" activities in urban and rural areas. Governors and legislators have, upon request, been counseled regarding planning problems within their jurisdictions.

Assistance to State boards is given occasionally by furnishing, upon request, consultants to supply guidance in technical matters. The regional offices make recommendations to the National Resources Planning Board for such consultant assignments. Consultant and other technical services are allocated for local planning activity only through the State planning boards and only on matters of State-wide or interstate significance or implication.

Activities of the Technical Committees

Operating in 1938-1940 were the Land, Science, Transportation, Water, Public Works, and Energy Resources Committees, composed of representatives from the staffs of departments of the Federal Government and leading professional men, who utilize the staff services and research facilities of the National Resources Planning Board and of other agencies concerned.

The Land Committee has made studies of land classification and land acquisition in the interest of improving tools for land planning; it has explored certain areas not now adequately covered by any one planning agency; it has acted as a sponsoring and coordinating agent for certain regional studies and joint investigations, like the Matanuska Valley joint land-economic survey in Alaska, the cooperative study of the backwater lands in the lower Mississippi Valley, and the Southern Florida water-supply and land-use survey; it has served as liaison with regional planning groups like those of the Pacific Northwest, the Northern Great Plains, and the Northern Lakes States Cut-over Area; and finally, it has acted as a reviewing and advisory agency for the National Resources Planning Board on matters of land planning and land policy. In addition to these specific undertakings, it has devoted attention to emerging problems in land use and has provided informally for early consideration of these problems by the Department of Agriculture and the Department of the Interior.

In its present program, the Land Committee has not entered into many activities which directly affect local planning. However, it has entered into liaison relationships with certain regional committees whose planning reports will be a source of information for local planning groups. In some cases, these regional groups will undertake to effectuate their programs by enlisting the aid of State and local bodies in making certain needed land-use adjustments. This will be particularly true in the Northern Lakes States where the regional committee has recommended the relocation of local units of government in certain cut-over counties.²

The Land Committee, in clearing regional reports for the National Resources Planning Board, affects the local planning of the areas concerned in a very indirect way. As its program develops, it is probable that the Land Committee will establish closer contacts with State and local planning groups, passing on to them recommendations for needed readjustments in the field of land planning.

Indirect assistance to local planning will be provided through the publication and distribution, when completed, of three reports prepared by the Land Committee.

The first of these is *Public Land Acquisition, Part 1: Rural Lands* and *Part 2: Urban Lands*, which considers the broad policy involved in the public acquisition of land by all agencies, Federal, State, and local, with major emphasis, however, on Federal acquisition.

The report, *Land Classification in the United States*, which deals principally with the land-classification activities of Federal departments and agencies, also contains chapters on the activities of county planning bodies and discusses land classification and the subject matter and techniques for land planning. These should prove of value and interest to local planning bodies in their land-classification work.

Perhaps more directly of interest to local planning will be the recommendations contained in the report, *Tax Delinquency*. This study deals with two aspects of the problem: (1) An investigation of the laws and judicial decisions in eight States with respect to the revision, assessment, and procedure for taking title of land and real estate; and (2) an investigation of the economic implications of tax delinquency where the delinquent area is a fringe area. Information will be developed on the relation of tax delinquency to changing land use in the rural-urban, farm-forest, drainage-irrigation, and farm-grazing areas. The recommendations developed for remedial measures, both as to land

² *Regional Planning, Part VIII—Northern Lakes States*. Report of the Northern Lakes States Regional Committee to the National Resources Committee, May 1939.

use and tax assessment and collection procedure, will be of interest and concern to local and State planning groups.

Plans are being developed for a study of the complex land-use problems of the rural-urban fringe areas, which lie at the outskirts of cities, between city and country. These areas of extensive premature subdivision and of shifting commercial and residential land usage are, in many cases, severe problem areas vitally affecting local planning. The Land Committee is seeking to outline studies which will develop findings and recommendations for the better control and development of rural-urban fringe-land use.

The Science Committee has issued a report which furnishes a more complete analysis of important problems in the relation of the Federal Government to research than has heretofore been available.*

One of the major purposes of the inquiry was to ascertain the administrative conditions under which research can be most advantageously stimulated and carried on. The problem of personnel was given special attention to determine whether the present governmental policies covering the recruitment, training, and compensation of personnel handicap government in competition with industry and educational institutions for the highest type of scientific personnel. An examination of the relative merits of different types of administrative personnel was made. The possibilities and means of closer collaboration between private and government research organizations were analyzed.

The Science Committee is carrying on its study of "Research—A National Resource" by the development of reports on research in business, in industry, and in the various States.

The Transportation Study.—During the last half of 1939 and the first half of 1940, work was begun on this study in order to develop materials that would serve as a basis for formulating broad outlines of the transportation policy for the country and to enable the development of a statement of ways and means of effectuating that policy. In response to the President's request, the following summarized statement of objectives of the study was outlined: (1) To review broadly the whole problem of transportation as it affects the natural and human resources of the United States and their utilization; (2) to examine the criteria and principles for determining the role of each mode of transport and the adequacy or overdevelopment of facilities of each mode; (3) to review the rate problem and theories underlying the rate structure with particular reference to the influence of the rate

structure on the effective use of facilities and on the geographic pattern of economic development; (4) to explore the role of public action through regulation, subsidies, or ownership in the development of a national transport policy; and (5) to formulate:

(a) The broad outlines of a national transportation policy;

(b) Appropriate procedures for implementing policy determinations; and

(c) Practical suggestions for immediate action in specific fields of transport policy.

The Water Resources Committee and its subcommittees comprise a membership drawn from Federal agencies concerned with water use and control and from State and public interests concerned with broad problems relating to water. Through subcommittees it has operated in such water planning fields as water policy, the analysis of State water laws, deficiencies of hydrologic data, studies of flood damage, methods of evaluating flood benefits, drainage policy, and pollution.

The Water Resources Committee has reviewed annually the proposed 6-year Federal public works program, as it relates to water projects, and has served as a clearing house in reviewing and advising on the construction projects of many individual Federal agencies concerned with water use and control, including much of the work undertaken by Federal relief agencies. The committee has also acted as the coordinating agency in several intensive investigations of water resources. A study of the Rio Grande River has been completed, and investigations of the water resources of the Pecos River and Southern Florida are underway. The Northern Great Plains Subcommittee has outlined a program of water use and control as a rehabilitation measure which directly relates to local planning within the area.

The Water Resources Committee has directly or indirectly affected local water planning in a number of ways. The committee has divided the country into drainage basins and has established drainage basin committees to deal with the water problems of each basin or related group of basins. These committees are composed of field men from Federal agencies; officials of State agencies, educational institutions, and private organizations; and representatives of the general public. The work of these committees has been carried on by subcommittees appointed for each of the sub-basins, or by subcommittees whose responsibility was that of developing a single topic pertaining to a group of sub-basins. The drainage basin committees and subcommittees have served as local planning agencies in basin-wide water planning, have reviewed water

* Research—A National Resource. Part 1: Relation of the Federal Government to Research. December 1938.

projects, analyzed water problems, and have aided local boards and groups in establishing useful water planning projects. In other instances, these committees have served mainly to provide a common meeting place for cooperation in water planning. In certain cases, the committees have been rather directly concerned with local planning problems, an example of which being the assistance rendered in preparing a project for the evaluation of the recreational potentialities of the Merrimac River Basin in Missouri, later sponsored by the Missouri State Planning Board.

There are assigned to each of the drainage basin committees consultants having a broad experience in the use and control of water.

The Public Works Committee has concerned itself with the relationship of public works to national planning and to the national economy. The study of public works has been attacked from many angles. Specifically, the committee has made a study of the economics of public works in relation to employment and business activities and is following up and giving general direction annually to the preparation of long-range programs of public works by States, cities, and other governmental units below the level of the Federal Government.

As a part of its program in carrying out the instructions of the President embodied in the following paragraph:

The preparation of advance 6-year programs of construction by Federal, State and local governments can do much to provide the wise investment of public funds. . . . The new Public Works Committee . . . can aid materially in these undertakings and I hope will also give us further information to promote wider understanding of the part which the wise choice and timing of public works can play toward increasing our national income.

the Public Works Committee has established demonstration studies in a number of cities scattered widely throughout the country. These studies were undertaken cooperatively with the cities selected and staff assistance was provided through the cooperation of the Public Works Administration.

The objective of each of these studies is to prepare a long-range public works program and capital budget for the city. The public works of the municipality should be related both to the needs of the community and to community finances. The selection of projects for inclusion in the program, therefore, involves local planning procedures. The determination of the volume of construction funds permitted by the municipal finances requires a detailed analysis of these finances, which in turn involves certain fact-finding or planning procedures. The net result of these studies should be

the stimulation of local planning not only in those cities where the studies are being undertaken but in other cities which may later desire to undertake the same public procedure.

Direct assistance was given to those municipalities which were selected for these demonstrations through the provision of financial and engineering experts to undertake the study. Indirect assistance will later be given to other cities through publication of the results of these studies in a manual of procedure.

The Energy Resources Committee is at work on the development of a long-range planning program based on the recommendations included in its report issued by the National Resources Planning Board.⁴ Broadly stated, the objective of the committee is the development of a coordinated national policy for the conservation of the energy resources, chiefly coal, petroleum, natural gas, and water power.

The Local Planning Committee was appointed in the fall of 1938 for the purpose of implementing the recommendations of the Urbanism Committee relating to local planning. The committee investigated the present and future status of the planning function in urban government, as well as the possibility of assistance, through State planning boards and other means, in the promotion of city, county, and other local planning. The committee assembled statements concerning the general functions, activities affecting and assistance to local planning of 46 Federal Government agencies, as a guide to the data available in these agencies for use in connection with local planning. These statements compose the present document.

In its contacts with local planning commissions and similar bodies throughout the country, the committee found that few of these had made full use of Federal aids and services to local planning. This fact is naturally reflected in the effectiveness of much of the present planning of local governmental activities. It is hoped that the dissemination of this information will result in a more complete utilization by local governments, as a regular procedure, of Federal aids to local planning. At the same time, the publication of *Federal Aids to Local Planning* will present to Federal Government agencies, for the first time, a composite picture of these Federal activities that relate to local planning today.

The Committee on Long-Range Work and Relief Policies was recently formed to study relief in relation to the Nation's resources. The study will cover problems involved in the development of long-range programs of work and relief policies. Based on an

⁴ *Energy Resources and National Policy*, January 1939.

analysis of existing relief information and experience, special emphasis will be placed on organization, administration, and finances as these factors concern Federal, State, and local governments and are related to available private resources and services.

Local Planning Data and Information Available

The Board has issued some 60 publications, all directly concerned with planning, in addition to a series of bulletins, outlines of procedure, suggestions, and circulars to regional, State, and local planning agencies. The major reports of the Board, as well as popular digests of them, may be purchased from the Superintendent of Documents, Government Printing Office, Washington, D. C. A complete bibliography is included at the end of this volume.

The library of the National Resources Planning Board maintains an up-to-date bibliography of reports by all State planning boards. These reports are sent in to this office, where they are filed for reference use, and a bibliography of them is compiled and circulated among the State boards and Federal departments and agencies.

There is also mimeographed research monograph material, which has been collected for reports and either not published or considerably condensed in publication. Certain of these are available at the library. The library also maintains an up-to-date planning catalog and has available considerable library material relative to all phases of planning.

Recent Reorganization of Activities

The foregoing description of the activities of the Board is based on work begun or carried on prior to June 30, 1940. Under the provisions of the President's Reorganization Plan No. I, the Board was transferred to the Executive Office of the President and charged with the functions of the National Resources Committee and its predecessors, and also with the functions contained in the Federal Employment Stabilization Act of 1931. The Independent Offices appropriations bill for the year 1940-41 directed the Board to expend the funds for the performance of functions and duties authorized by the Stabilization Act.

In compliance with this congressional direction, the Board has reoriented its organization to effect the functions of that act. Its work for the 1940-41 fiscal

year will be particularly directed along the following lines:

To advise the President from time to time of the trend of employment and business activity, and of the existence or approach of periods of business depression and unemployment in the United States or in any substantial portion thereof; and to recommend measures leading to the improvement and stabilization of economic conditions;

To collect information concerning advance construction plans and estimates by all Federal agencies, the States, municipalities, and other public and private agencies, and to list for the President and the Congress all proposed public works in the order of their relative importance with respect to, (1) the greatest good to the greatest number of people, (2) the emergency necessities of the Nation, and (3) the social, economic, and cultural advancement of the people of the United States.

Defense Activities

Like other agencies of the Federal Government, much of the energy of the Board and its staff is now concentrated on problems of national defense. As the planning arm of the Executive Office of the President, the Board is concerned chiefly with the long-range as well as more immediate aspects and effects on national development and the national economy of decisions which must be made in the defense emergency.

In most cases, necessary emergency action can be taken in ways which determine long-range objectives as well as meet immediate defense needs. Without interfering or delaying action, the planning agency can help to keep these opportunities and related dangers before those responsible for making decisions. Through concurrent studies, like that now under way on problems of industrial location, improved criteria and procedures can be evolved and put in use.

Consulting Assistance

Under the conditions outlined in the preceding paragraphs, consulting services are now limited to the following purposes: (1) State public works programming demonstrations; (2) State industrial location studies; (3) planning in critical problem areas caused by the impact of defense establishments; (4) preparation of plans for regional development and regional 6-year public works programs; and (5) development of drainage basin plans and review of Federal projects by drainage basin committees.

DEPARTMENT OF AGRICULTURE

AGRICULTURAL ADJUSTMENT ADMINISTRATION

Agricultural Adjustment Act of 1938
Soil Conservation and Domestic Allotment Act of 1936, and Amendments
Marketing Agreement Act of 1937
Sugar Act of 1937
Agricultural Adjustment Act of 1933

General Introductory Statement

The Agricultural Adjustment Administration is an agency within the Department of Agriculture which administers the agricultural conservation program under the Soil Conservation and Domestic Allotment Act of 1936, and marketing quotas, commodity loans, and parity payments under the Agricultural Adjustment Act of 1938. These functions have been coordinated into a unified program which is administered through committees of farmers chosen by the farmers participating in the program. These committees also assist in the administration of the Sugar Act of 1937 and the Federal Crop Insurance program for wheat. The objectives of the program of the Agricultural Adjustment Administration have been first, the enhancement of the farmer's income; second, the long-time internal adjustments in farming; and third, the development of farm programs on a permanently democratic plan.

Conservation and parity payments increase farm income directly, while other phases contribute to an improved income by other means. The adjustment of acreage to a level which will produce an amount that will meet normal requirements, plus an adequate reserve supply, removes part of the year-to-year variation in prices. The carrying over of excessive supplies resulting from fluctuations in yields, instead of dumping them on the market in the year produced, also helps to smooth out year-to-year variation in prices.

The long-time internal adjustments in farming call for shifts in production in order to supply commodities for which there is demand and to conserve the fertility of the land and prevent wasteful exploitation and erosion. In order to accomplish this objective there must be efficiency in farming operations, adequate supplies for consumers, adequate reserves for use in lean years and emergencies, and the planned use of land.

In order for the planned use of land to be efficient and in accord with democratic principles, farmers participate in the planning and in the administering of the programs which are formulated by them within the legislation authorizing the programs.

Brief General Statement of Functions

The farm program administered by the Agricultural Adjustment Administration is formulated and modified upon the basis of recommendations originating from community and county meetings of farmers held for this specific purpose. The recommendations are fitted together for the State, the region, and the Nation as a whole. Farmers take the active part in all of the planning, with officials furnishing information and indicating the limitations laid down by legislation. The objectives are (1) to preserve and improve the soil fertility; (2) promote the economic use and conservation of the land; (3) reduce the exploitation and wasteful and unscientific use of the national soil resources; (4) prevent soil erosion; and (5) improve the purchasing power of the farmer. These purposes are accomplished (1) through the encouragement of soil-conserving crops and soil-building practices; (2) assistance in marketing of agricultural commodities for domestic consumption and exportation; and (3) regulation of interstate and foreign commerce in cotton, wheat, corn, tobacco, and rice to the extent necessary to provide an orderly, adequate, and balanced flow of such commodities in interstate and foreign commerce through storage of reserve supplies, loans, and marketing quotas. All these functions are fitted together to accomplish the objectives set forth above and to assist farmers to obtain, so far as practicable, parity prices and parity income for such commodities and to assist consumers to obtain an adequate and steady supply of such commodities at fair prices.

The work of the administration in any particular local area fits together so completely that it is generally considered as one program. The procedure followed in developing the program each year is to review the activities of the preceding year and consider the modifications that seem desirable for the next year, in order to better accomplish the purposes of the program. At community meetings the results of the program of the previous year for particular communities are considered in detail. At the same time, enough of the results of the program in other areas and in the Nation

as a whole are considered, so that unity of purpose is made a part of the thinking of the farmers in making plans for the coming year. Suggested modifications for the communities are combined for the county by the committeemen who have been elected by the farmers to serve as their representatives. The recommendations of the counties are combined to form a set of recommendations for the State, and these in turn are combined by regions and for the Nation as a whole to form one program. The framework of the program thus formulated is taken back through the same channels to the counties, where consideration is given to incorporating the necessary local specifications and adaptations to make the program workable in each local area. These special recommendations as to detail move through the same channels as the original recommendations and are incorporated in the final program for the county.

Members of the Extension Service and the experiment station staff are brought into the meetings in the county and State when planning work is being done in order that these meetings may have the benefit of their scientific training and knowledge of local conditions. Local representatives of other agencies which are directly concerned with the program for a particular area are either brought into the planning meetings or consulted in order that the program may be coordinated with their activities. A coordination committee consisting of representatives of the various agencies of the Department of Agriculture considers the program and makes recommendations relative to the coordination of the program to the activities of these other agencies.

Activities Affecting and Assistance to Local Planning

In addition to the planning described above, which is national in scope but which has local adaptations, there are instances of assistance given to planning on a local basis. These activities are the result of purely local conditions which require correction before a farm program can be fully effective in that area, such as, for example, the destruction by hurricane of the facilities for producing the crop customary to the area. It then becomes necessary to consider whether to rebuild facilities and continue the production of the crop or to shift to the production of some other crop, which does not require facilities such as buildings, for a temporary period until the necessary facilities may be rebuilt. Under such conditions the Agricultural Adjustment Administration furnishes available information and technical assistance to the local authorities considering the problem. In some instances additional information has been collected in the field to assist in making plans to meet such conditions.

The records of the Agricultural Adjustment Administration furnish a basis for planning inasmuch as

rather complete data are on file in each county office for each farm participating in the program. The aerial photographs available for many areas form a basis for planning on a local as well as a State basis. In some instances the aerial photographs have been obtained in cooperation with State planning boards.

The Agricultural Adjustment Administration participates in the work of the county land-use planning committees which bring together leading farmers representing the different types of agriculture in the county and the local heads of agricultural agencies operating in the county, a group whose primary function is to plan for the most efficient use of the land in the county. There are also State land-use planning committees which bring together as State representatives similar groups of individuals, who review the work of the county land-use planning committees. The recommendations of these committees are utilized in formulating agricultural adjustment programs.

A discussion of the activities of the Agricultural Adjustment Administration in local planning would not be complete without pointing out the planning which is done each year on individual farms. Each farmer participating in the farm program makes a plan of operation for his farm for the year. His plan is influenced by the program and by the farmer's consultation with a representative of the Agricultural Adjustment Administration. The changes in the farming operations of individual farms, when taken together, constitute a trend of change which tends to be fairly uniform for the local area.

Local Planning Data and Information Available

The Agricultural Adjustment Administration has in each county office data showing the acreage of land for each farm that participates in the program. Each year of participation the county office obtains records of the acreages of the various crops grown and the soil-building practices performed on the farm. Information pertaining to the production and yield is also available. Complete and detailed records of sales are available for commodities for which marketing quotas are in effect.

Mention was made previously of special surveys conducted in order to obtain additional information needed to plan the work in an area. This information is available in the county or State offices for the use of the committees in planning programs.

List of Available Publications. A bibliography of the available publications of the Agricultural Adjustment Administration, divided into general information, marketing and commodity information, and regional information.

Agriculture's Share in the National Income. October 1935, 38 pp., illus. A careful study of this subject.

Agricultural Conservation 1939. June 1937, 200 p. Administrator's annual report for 1939.

The New Farm Act. February 1933, 8 pp. A short summary of the provisions of the Agricultural Adjustment Act of 1933.

Agricultural Adjustment, 1937-38. November 1938, 885 pp. Administrator's annual report for the period January 1, 1937, through June 30, 1938.

Agricultural Marketing Programs. August 1937, 10 pp. An explanation of the provisions of the Agricultural Marketing Agreement Act of 1937.

NOR Leaflet No. 301.—1939 AAA Farm Program. December 1938, 4 pp., illus. Concise statement of the 1939 program in the North Central Region.

SR Leaflet No. 301-A.—How the AAA Farm Program Works. January 1939, 11 pp., illus. Concise statement of the 1939 program in Area A of the Southern Region: Oklahoma, Texas, and part of Arkansas.

SR Leaflet No. 301-B.—How the AAA Farm Program Works. January 1939, 8 pp. Concise statement of the 1939 program in Area B of the Southern Region: Alabama, Florida, Georgia, Louisiana, Mississippi, South Carolina, and part of Arkansas.

SR Leaflet No. 351.—The AAA Range Conservation Program of 1939. January 1939, 12 pp., illus. Concise statement of the 1939 program for Texas and Oklahoma range lands.

BUREAU OF AGRICULTURAL ECONOMICS

Reorganization Memorandum of the Secretary of Agriculture, October 6, 1938
 Various Memoranda Relative to the Reorganization of the Department of Agriculture
 Various Acts Administered or Regulated by the Bureau

General Introductory Statement

During the past 6 years the Department of Agriculture and the several State land-management agencies have been given many new responsibilities in connection with the administration of public programs which seek to provide for agriculture a more stable income and a more balanced relationship to the rest of our economy. These legislative measures are designed to include the promotion of agricultural adjustment, conservation, flood control, crop insurance, farm forestry, retirement of submarginal land, rural rehabilitation, water conservation and utilization, adequate credit and marketing facilities, improvements in land taxation, public finance, farm tenancy, and other institutional factors having a direct bearing upon the security and stability of rural people and the efficient production, distribution, and utilization of agricultural products.

Although these several action programs have the same ultimate objectives, each employs differing measures and procedures for attaining the desired goals. Many of the programs are directed toward the solution of highly complex agricultural problems of the type which can best be solved by group, State, and national action rather than by individual action. It is necessary, therefore, from the standpoint both of the public agencies and the farmers themselves, that these programs be harmonized and applied in the field so as to fit the particular needs, conditions, and problems of local areas consistent with broad national program objectives. This is important because these various programs, as they are applied to a given locality, in one way or another have a marked effect upon the utilization and conservation of land resources, the income and wellbeing of the people dependent upon the land, and the consumers of agricultural products. If these public programs are to be carried out efficiently, it is necessary also that the people living in the adjustment areas be in agreement on what constitutes a sound land-use

plan and a workable adjustment program for their locality.

With the increasing emphasis upon agricultural programs, it has become apparent that the problem of planning, correlating, and coordinating the various lines of public and group action is becoming more critical and requires the immediate attention of all agricultural agencies concerned. Experience to date has led the Department of Agriculture and the State Land Grant Colleges to the conclusion that true coordination and effective program-building begins deep down in the fact-finding and planning process and that the most desirable methods for attaining these ends in a democratic society involve carrying such activities through State and local planning committees such as are being sponsored under the agricultural land-use planning program.

Brief General Statement of Agency Functions

The Bureau of Agricultural Economics, as reconstituted by the departmental reorganization of October 6, 1938, is the economic research and planning agency of the Department of Agriculture. Its research involves the economics of agricultural production, transportation and marketing, farm organization and management, land economics and land use, farm financial problems, statistical and historical data relating to agriculture, farm population movement, tenancy, farm labor, and other problems of rural welfare. The results of this research are both reported to the public and utilized in the formulation and development of programs of action administered by other agencies of the Department.

Formulation and development of programs of action take place in cooperation with the action agencies of the Department and begin out in the county in the local planning process, in which farmers not only participate

but are called upon to make decisions of policy. Programs of action are finally executed, after approval at necessary county, State, and Federal levels, are thus the joint product of farmers and technicians.

The Division of Agricultural Finance is concerned with research and planning in connection with the programs of Federal, State, and local agencies in the fields of agricultural insurance, including crop insurance, farm taxation and local government, farm-mortgage credit, and short-term credit: it conducts studies for the purpose of determining the effect of such programs upon farmers, and for the purpose of suggesting needed improvements in the policies of agencies operating in these four fields.

The Division of Economic Information assists other divisions of the Bureau in the preparation of publications and informational material, and acts as a final clearing house for the Bureau in the dissemination of all information.

The Division of Farm Management and Costs studies the internal economy of the farm or ranch, and appraises the effect on that economy of local, regional and national agricultural programs and policies; and in cooperation with the other divisions and administrative agencies concerned, develops or assists in developing new programs or revisions in existing programs which will encourage conservation, efficient production, and improved farm organization and farm practices.

The Division of Farm Population and Rural Welfare, seeking to determine the relationship of individuals and groups to social and economic adjustments and maladjustments, is a research and planning agency concerned with four fields of work: community organization and changes; labor, tenancy and rehabilitation; social participation and adjustments; population and human geography.

The Division of Land Economics is concerned with a broad program of research in problems of land use and occupancy, with considerable attention to planning for land-use adjustments; the development of techniques for land classification; the collection, description, and analysis of data on farm real estate values, local land utilization, water land use in connection with agriculture, land tenure, local government and taxation, public land administration and related problems. Particular attention is being given to the relevant institutional phases of land use and occupancy, and devices of land adjustment and settlement guidance. Research and planning are also conducted for the flood control and water facilities programs of the Department.

The Division of Marketing and Transportation Research studies the marketing programs and policies of the Federal, State, and local governments; conducts broad economic studies of the marketing system to determine what changes are necessary to make it more

efficient in serving the farmer and the public; cooperates with national and local marketing agencies, cooperative associations, and other groups in appraising the adequacy and effectiveness of certain parts of the present marketing system, and in developing ways and means of improving them; reviews the results of marketing research to use these results in appraising current Federal marketing programs and policies in order to assist in the development of new programs or in the revision of existing programs with a view to promoting efficient marketing, utilizing farm and food products, bettering consumers' diets, and improving agricultural income; and serves as the Department's research agency in the field of transportation problems relating to the marketing of farm products.

The Division of Program Study and Discussion organizes leadership training schools conducted in cooperation with the State agricultural colleges and the several administrative and education agencies of the Department; cooperates with the State agricultural colleges, farm organizations and other agencies in conducting discussion groups in farm communities; and prepares and supplies discussion outlines and materials and otherwise assists farm people, agricultural colleges, and other agencies in promoting discussion of current agricultural problems.

The Division of Program Surveys, designed primarily to be of use to administrators, maintains a continuous system of field reporting through which the Department and the Bureau can obtain representative first-hand farmer reactions bearing on the effectiveness of farm programs, elements in the programs which are felt to be weakest or least applicable locally, and modifications which are felt to be most needed and most workable in the light of local experience.

The Division of Statistical and Historical Research applies statistical and historical methods in analysis of the economic problems of agriculture; keeps records of statistical and historical data relating to agriculture; and reports to the public and to special groups information on prices, production, marketing, population, number of farms, farm income, agricultural history and other significant factors relating to agriculture.

The Division of State and Local Planning was established in March 1939, after the reorganized Bureau of Agricultural Economics had been assigned the role of central planning agency for the Department of Agriculture, in addition to its traditional research functions. This significant change in the status of the Bureau stems from the memorandum on reorganization issued by the Secretary of Agriculture on October 6, 1938. The Division of State and Local Planning is primarily concerned with the development and conduct of the cooperative program of agricultural planning activities undertaken by the several State land-grant colleges and the Bu-

reau in accordance with the agreement reached by these colleges and the United States Department of Agriculture at the conference held on July 8, 1939, at Mount Weather, Va.

The *Division of Program Development and Coordination* maintains contact with the administrative agencies of the Department in order to keep informed with respect to the several action programs of the Department; reviews the findings of the several research and planning divisions of the Bureau and other research agencies of the Department; studies or assists in a continuous study and appraisal of the results obtained and problems faced by the several action agencies within the Department; and develops or assists in developing suggested programs or lines of action in the agricultural field.

Specifically, the work of the Division will include the following lines of activity:

1. Serving as a liaison agency between the action agencies of the Department (such as the Agricultural Adjustment Administration, the Forest Service, the Soil Conservation Service, and the Farm Security Administration) and the Bureau. In this work, the Division is expected to keep informed as to the nature and content of the current programs of each of the action agencies, as to the results which are being obtained, and as to the problems which need to be considered and solved if the action programs are to be successfully continued or improved.
2. Working with other sections and Divisions of the Bureau in outlining the work necessary to answer the planning questions raised by the action agencies, and with the responsible members of the Bureau and the agency or agencies involved in suggesting changes or revisions needed in programs developed under such acts as title III of the Bankhead-Jones Farm Tenant Act, the Water Facilities Act, the Flood Control Act, as amended, the Sugar Act of 1937, the Soil Conservation and Domestic Allotment Act, as amended, and the Agricultural Adjustment Act of 1938.
3. Assembling, analyzing, and correlating data with respect to the goals toward which the over-all agricultural program should be directed. This work will require the calculation of goals which might be set up from the standpoint of (a) acreages, numbers, and production needed to supply the requirements of domestic consumers and the export market, and distribution of these acreages, numbers, and production as between the several crops, classes of livestock, and different type-of-farming areas or regions of the Nation; (b) prices, and the income and distribution of income as between the several agricultural groups which would seem reasonable in view of the general level of income within the Nation; and (c) farming practices and uses of land which are desirable from the standpoint of efficient production and agricultural conservation.
4. Serving as a general service unit to the Chief of the Bureau and the analysts directly responsible for the planning work of the Bureau, in assembling data and preparing analyses and reports with respect to the numerous suggestions which are referred to the Bureau of Agricultural Economics for appraisal and criticism, and with respect to a wide range of subjects which are of special interest from time to time and which require immediate consideration.

Activities Affecting and Assistance to Local Planning

The divisions of the Bureau of Agricultural Economics whose activities most directly affect local planning are the Division of State and Local Planning, the Division of Land Economics, the Division of Farm Population and Rural Welfare, and the Division of Farm Management and Costs.

Division of State and Local Planning

1. *Planning in the States.*—The agricultural land-use planning program in the State is conducted by a State Land Use Planning Committee. This committee consists of farmers representing the major types of farming areas in the State and administrative officials in charge of the action programs of the Department of Agriculture within the State, and such officials of State agencies as have responsibility for the administration or management of land-use programs being conducted under State laws. The State director of extension is chairman of this State Land Use Planning Committee, and an employee of the Division of State and Local Planning of the Bureau of Agricultural Economics known as the State BAE Representative functions as committee secretary. The State committee is expected to serve as the advisory planning and coordinating group for all public agricultural programs operating in the State. Among other things, State committees will formulate State-wide agricultural plans and unified programs, and examine and make recommendations concerning various types of action programs; will appraise the plans, programs, conclusions, and suggestions made by county and community planning committees; develop recommendations designed to integrate the several action programs in the State; and perform such other functions as are necessary to contribute to the formulation of well-rounded, comprehensive, agricultural plans and programs.

Another important feature of the planning organization in the State is the Joint Land-Grant College-BAE Committee, composed of the State representative of the Bureau of Agricultural Economics and representatives of the State Agricultural Extension Service and Agricultural Experiment Station. The joint committee in each State performs the important function of developing recommendations concerning the nature and scope of the planning work to be carried on in the State, acts as a service committee for the State Land Use Planning Committee on the technical and procedural aspects of the planning program, and in other ways assists in the conduct of the work. For example, the joint committee helps in developing outlines, schedules, and procedures to be used in assembling, analyzing, and transmitting to the county planning committees such available information as is pertinent to the agricultural and land use problems of each community. Likewise, this joint committee gives consideration to the research, investigational, and survey work necessary in the State to provide County and State Land Use Planning Committees with information needed to formulate recommendations concerning the solution of agricultural land use problems, and on agricultural policies applicable to conditions within the State. When appropriate, the joint committee will

stimulate the organization of pertinent planning survey and research projects.

✓ *2. Planning in the Counties.*—In the counties, the planning activities are carried on by County Land Use Planning Committees which are composed of at least 10 farm men and women, together with a few forest owners in counties where forestry is a problem, the county agent, at least one member of the A. A. A. Administrative Committee, the county or district Farm Security Supervisor, and other State and Department officials in the county who have responsibility for the administration of agricultural land-use programs. The farmer membership constitutes a substantial majority and a farmer is chairman of each county committee. The county agent generally functions as the executive officer or secretary of the county committee. State Land Use Planning Committees generally select the counties in which planning work is to be initiated. Because of financial and organizational limitations, not all counties can be adequately guided in the planning work during the coming year. Counties are usually selected in different types of farming areas in order that as wide a range of conditions as possible may be represented.

In actually carrying on the planning activities of the county, much of the work is organized on a community basis, so that community committees function informally as subcommittees of the county planning committee. In all instances, however, the results of the work done by these communities are analyzed, appraised, and correlated by the county committee and worked up into land-use plans and agricultural programs for the county as a unit.

3. Character of Present Agricultural Planning.—Emphasis is being placed during the current year upon the development of three major lines of work in the field, namely: (a) The organization of land-use planning committees and preparatory educational work with such committees; (b) the completion of an area mapping and classification project in at least one county in every State within each area with a different type of farming area of each State; and (c) the development of a unified program in at least one county of each State.

The preparatory work is designed to acquaint the county agents and the local planning committees with the scope and objectives of the agricultural land-use planning program; to prepare them for the more intensive work to be undertaken later; and to provide the organizational framework whereby various types of extension activities such as production and price outlook meetings, marketing programs, farm management schools, etc., can begin to tie into the agricultural planning program.

The area mapping and classification project is designed to develop a picture of the land resources of the county, the present utilization of these resources, the problems associated with land use, and the types of land-use adjustments that are required in dealing appropriately with these problems to provide a permanent, balanced, agricultural economy and better conditions of rural living. Briefly, this work is divided into four phases:

1. The first major phase involves: (a) Breaking down or subdividing the county and community map into a number of local land-use areas, each of which is relatively uniform throughout with respect to the similarity or pattern of its physical features, present land use, and existing land-use problems; and (b) the presentation, in the report, of a brief description of the important features of each area and the land-use problems existing therein. The aim of this phase of the project is to designate the boundaries of local land-use areas which should be distinguished from each other, for planning purposes, because each area represents basic differences in the combination of physical and land-use characteristics between the several parts of the county or community.

2. The second major phase involves the classification of each of the local land-use areas designated on the county or community map. This is an analytical classification in which areas are classified and in which the categories or classes are expressed in terms of the suitability of the particular area for some selected use or combination of uses.

3. A third phase consists of determining and explaining, in the report, what types of shifts in land use or adjustments in farming practices are needed in each land-use area, including suggestions, recommendations, and conclusions concerning measures which should be taken to effect the shifts in land use and adjustments in farming thought desirable.

4. The fourth phase of the project involves working up the findings and recommendations for each county into usable form and making the results available for use by interested local, State, and Federal agencies.

Because of limited funds and personnel, area mapping and classification work was inaugurated in only about 450 counties during 1938-39. During the current fiscal year, the work is being started in about 500 additional counties, and it is hoped that ultimately the program can be extended to all of the agricultural counties in the country.

Area mapping and classification work is a necessary preliminary step to the ultimate development of unified county programs. The latter are designed to give effect to recommended land-use adjustments and to bring about the coordination of action programs to this end. In formulating unified programs, county land-use planning committees appraise existing agricultural programs from the standpoint of their adequacy in meeting local needs and problems which are brought to light by the area mapping and classification work. Recommendations are then made which, if adopted, would enable the action programs more effectively to meet these needs. Recommendations may apply to the programs of local,

State, or Federal agencies. They may involve the allocation of funds for some particular purpose, the passage of State or Federal legislation, the adoption of specially desirable procedures, changes in the administrative regulations under which existing programs operate, or the development of land acquisition, soil-conservation district, water facilities, or other types of area programs.

At the beginning it was planned that a unified county program should be inaugurated in at least one county in each State. Now the work is being extended to a second and sometimes to several counties in some States.

4. Relationship of Agricultural Planning to Other Types of Planning and to the Action Programs.—Area maps and classification reports, and recommendations from unified program counties, go to State Land Use Planning Committees and, when approved by them, are either acted upon by State and local officials of the agencies affected or transmitted to the Bureau of Agricultural Economics through the Division of State and Local Planning in Washington. Proposals requiring administrative approval in Washington are usually taken up through the administrative channels of the agency concerned, beginning with its representative in the county or State. Proposals requiring interbureau or departmental consideration are received by the Bureau, and are then taken up directly with the agencies affected or, through an interbureau coordinating committee, with the Agricultural Program Board of the Department of Agriculture. In many instances, however, recommendations for the improvement and coordination of programs can be acted upon by State and local administrative personnel.

When action agencies or the Agricultural Program Board approve proposed modifications of the provisions of action programs, appropriate changes in existing regulations are placed in effect in the counties concerned.

Another function of the State and local planning activity has to do with correlation between county plans and the "project-area" plans which are developed in connection with particular programs. The formulation and development of project-area plans and programs is an important new development in the Department. At the present time, land-use adjustment, water facilities, soil-conservation district, and flood-control programs are the joint responsibility of two or more action agencies or technical or coordinating agencies. Ordinarily, these programs do not operate within existing county or State boundaries, but embrace areas comprising parts of one or more political jurisdictions.

The Bureau of Agricultural Economics has the important function of harmonizing these area plans with plans developed at the State and county levels. This involves full participation by the State, county, and

community committees in the development of these plans and their correlation with the work of these committees.

Agricultural land-use plans can be made most effectively when they are developed in the light of plans for industry, transport, communication, population redistribution, and other major planning objectives of the State Planning Boards. It is of the utmost importance that the work of the State Land Use Planning Committees be integrated with that of the State Planning Boards. This integration is being achieved in many States by the simple device of having the membership of each of the two bodies include an official representative from the other. Through such reciprocal representation, duplication of effort or the development of misunderstanding between the two bodies can be avoided. In general, the State Planning Boards look to the State Land Use Planning Committees as most competent to do planning for agriculture, and primarily responsible for it. But if agricultural land-use plans are to encompass the most desirable long-time objectives, it is necessary that they not be conceived in vacuo, but that they attain proper orientation within the more inclusive sphere in which State Planning Boards are operating.

Reciprocal representation has been adopted already in 18 States and in 16 others the State Planning Board is represented on the membership of the State Land Use Planning Committees. This has promoted close and harmonious working relationships between the two bodies and it is hoped that a similar strengthening of relationships between them may be achieved in the other States in which these organizations exist.

Division of Land Economics

Institutional Adjustments in Relation to Land Use

An important segment of the program of this Division of Land Economics is directed toward assistance to State and local agencies in improving their legal and administrative institutions that influence the use of the land.

1. *Land Tenure.*—The Division is conducting general lines of investigation in the field of land ownership and farm tenancy under seven specific categories, as follows:

- A. The influence of land tenure upon land use and conservation, upon flood hazards and water run-off, and upon the economic and social well-being of owners and tenants.
- B. Legal-economic investigations of the relations between landlords and tenants.
- C. Investigations of tenure-reform programs in foreign countries.
- D. Investigations looking toward improvement of lease forms and leasing arrangements between landlords and tenants.
- E. Investigations to facilitate land tenure adjustments in selected unified counties.

F. Investigations to ascertain the relationship between selected cultural groups and land tenure and land use.

G. Investigations to delimit and describe various types of tenancy areas throughout the entire country in order that more specific remedial measures and action programs may be developed.

The tenure program of the Division involves not only research, but planning, and is organized in such a way that specific programs developed will be guided and directed from an administrative viewpoint and with the purpose of making adjustments in the programs where experience indicates they are advisable. For example, the studies on the legal-economic aspects of landlord-tenant relations involve a determination of the present status of the law and the manner in which it affects the day-to-day operations of landlords and tenants, the presentation and discussion of remedial measures which may well be enacted by State legislatures, and the development of administrative rules and regulations and procedures for properly putting into effect the statutes that are enacted. Programs of this type are carried on in active cooperation with appropriate State agencies, particularly the several Governor's commissions, which have been appointed upon the instructions of State legislatures to consider the land-tenure problem and make recommendations for improving the present situation in the various States.

Another appropriate example of the way in which the Division assists local groups in planning appropriate institutional adjustments is in connection with the unified county program planning work of the Department. This work is of two general types: One consists of detailed studies in selected counties to supply pertinent information and to present appropriate remedial measures to local groups in order that they may determine what procedures are most applicable to their situation; and the other is concerned with the development of detailed work outlines and appropriate factual material to accompany these outlines so that interested local planning committees can study their own land-tenure problems with a minimum of technical assistance, and can arrive at appropriate adjustments in light of peculiar local conditions.

The studies designed to improve farm-lease forms and leasing arrangements continue to supply up-to-date information to various agencies of the Department dealing with local landlords and tenants, county program planning committees, and local individuals who are interested in the use of written agricultural leases.

Studies designed to show the relationship between land-tenure and land-use problems are continuing in several selected localities. The studies of foreign land-tenure programs are continuing, and publications have been released from time to time. Others are planned for the future. Two studies to show the relation between

various cultural groups and land tenure and land use have been completed. Although these three general types of studies are not tied up directly with specific planning processes, they are designed to furnish factual information that is necessary in order to plan wisely in local communities.

Throughout the research and planning process, the Division operates in close cooperation with local groups through a thoroughly democratic process. There is a large degree of local participation, and possible remedial measures are presented as a basis for discussion and determination upon appropriate measures by local groups. This procedure has proved highly effective whether on the State level, county level, or community level, or with private individuals.

2. *Local Government and Finance.*—Local government occupies an important position in relation to land-utilization programs as a participant in the planning program, and the effecting of land adjustments, and because its services and finances are strongly influenced by basic changes in land use and occupancy. Surveys have indicated opportunities for local reorganization to administer and support adequate levels of public services, improvement of tax-assessment, tax-delinquency, and reversion procedures, administration of county-owned land—all of which exert considerable influence upon the use and conservation of land.

The public finance work of the Division consists chiefly of general studies of the interrelationships of land-taxation and rural-government organization on the one hand, and land use on the other, and activities aimed at the adoption of improved procedures by States and counties for taking title to and administering chronically tax-delinquent land.

Illustrative of the general type of public-finance study is one made in Billings County, N. Dak., of the possibilities of county consolidation or county disorganization, and reorganization of the local school and road functions, in view of severe land-use maladjustments and the substantial acquisition of land by public agencies.

An instance of local participation in and local benefits from the public-finance program is occurring in southeastern Colorado. As a part of a comprehensive analysis of land utilization in Baca County, information was assembled relative to the actual present use of the land of the county. This survey revealed the fact that a large portion of the land universally conceded to be suited only for grazing had for years been classified and assessed as farming land. It was found that the annual taxes had tended to exceed the lease value of the land for grazing, and had constituted a positive influence for the destructive use of the lands either by cropping or by overgrazing, so that the owner

could secure sufficient income from the property to pay the taxes. The fact that this exploitative policy failed in many cases was evidenced by the extreme rate of tax delinquency of lands in the county.

Basic information and maps assembled in the survey were presented before the Board of County Commissioners of Baca County. As a result, the county assessor was authorized to collaborate with technical personnel supplied by the Department of Agriculture, to make a comprehensive reclassification and reassessment of all dry lands in the county. This reassessment was completed, and taxes on grazing lands are now more equitable in their relation to lease returns.

Subsequently, interested officers of other counties in southeastern Colorado, together with the State Tax Commission, met to consider the problem and to review the findings of Baca County. Following this meeting, the State Tax Commission went on record as favoring reclassification of lands and reassessment along the lines indicated in the Baca County analysis. Several of the nearby counties, in cooperation with the Department of Agriculture trained personnel, are assembling information for this purpose.

3. *Directional Measures.*—Research in this Division relating to directional measures is concerned with three principal types of controls: (1) The control of land use by police power measures (rural zoning or land-use regulations adopted by Soil Conservation Districts); (2) the control of land use by public ownership and administration; and (3) the control of land use by cooperative action (cooperative grazing associations).

In addition to assisting State and local agencies in the preparation, institution, and administration of desirable directional measures, the Division conducts a program of long-time research designed to develop new controls needed to insure an orderly use of land resources. For example, to determine the types of measures needed to secure a desirable pattern of land utilization in the coastal region of the Pacific Northwest, a comprehensive investigation was conducted in a representative area in the State of Oregon. Preliminary results indicate that with the rapid decline of the forest industry in this region and the transition from a forest to a grazing economy, has come a need for resolving the conflicts that have arisen between farmers and foresters over the burning of cut-over lands. Through the cooperation of various local, State, and Federal agencies, a program has developed which, if adopted, should insure the use of land for grazing while reducing the danger to forest areas.

In an effort to bring about a stabilization of ranching economy in abandoned areas of intensive wheat production in the Great Plains, studies were undertaken in order to develop measures that might contribute to a solution of this problem. In one project an appraisal

was made of zoning as a means of preventing inefficient expenditures of public funds for roads, schools, and other public services as well as of discouraging return of cash-crop farming in areas not adapted to this use. In another study, effort was directed toward securing a more desirable type of public land management in the Great Plains region.

A recently completed directional-measures investigation was designed to aid new settlement in the delta of the Mississippi Alluvial Valley. Through the intensive study of a representative group of parishes in Louisiana, it was possible to suggest to State and local land planning committees and to the representatives of the principal agricultural agencies in the area, an action program which would insure an economic and socially desirable type of agricultural settlement.

In the program for the direction of settlement were specific suggestions for preventing settlement on bad lands, securing adequate systems of tenure, preventing the development of uneconomic roads and schools, adjusting the A. A. A. cotton-control program, reducing the cost to settlers of cut-over land, and instituting an economic system of drainage districts.

4. *Land Settlement.*—The land settlement work of the Division is concerned with opportunities for settlement of disadvantaged rural people and with opportunities for rural people with low incomes from farming to secure supplementary employment in forestry, servicing of recreation or urban industry.

Illustrative of this type of work are reports which were prepared for the Rural Rehabilitation supervisors of the Great Plains States, outlining the opportunities for and the limitations on settlement in various sections of the 12 States to which drought refugees have been migrating. In cooperation with the Divisions of Farm Management and Costs and Farm Population and Rural Welfare, the Division has been engaged in a comprehensive survey of the land settlement problem in the Pacific Coast States which has been created by immigration from the drought areas and from those sections of the Cotton Belt where machinery is replacing large numbers of land laborers. This survey seeks to describe the various types of settlement which have been undertaken, to appraise the progress of settlers, to determine the obstacles to successful settlement, and to suggest methods of removing them, to discover the characteristics and economic and social background of the settlers as they may have a bearing on plans for aiding them, and to evaluate Federal programs which have been undertaken in the region to aid settlement.

5. *Institutional Analysis.*—In many respects, land-use research and planning encounter questions in the field of public administration, public law, and governmental organization on the State and local level. These questions often require research into the character and in-

fluence of statutes, administrative arrangements, political organization, and legal policies on land use, and their relation to conditions of land utilization and land tenure. The work in institutional analysis serves this function. It operates to bring the viewpoint and techniques of the political scientist to bear on land economics research and planning, and to formulate into terms of specific and detailed public programs the recommendations growing out of this research. The services of the institutional-analysis technicians are available to State and local groups to provide advice and assistance in devising specific land-use adjustment measures.

Land Utilization Studies

1. Land Use Adjustment.—As an extension of divisional work previously accomplished in identifying and classifying rural land-use problems, a map on a national scale has been prepared showing land-use adjustment areas described in terms of the significant land use, management, population, and institutional problems which characterize them. In turn, these problems are visualized as having arisen out of a maladjusted situation within and between principal types of land use—farming, forestry, grazing, urban. As designed, moreover, to carry forward the Department's program for farm people, these adjustments themselves are to be regarded as being those needed to accomplish the broad objectives of establishment of sound land use, the management of land and other resources, and the raising of the level of farm living.

Application is also being made of the land-use planning approach in the development of a special type of regional differentiation which, it is believed, will more effectively meet present planning needs. Now in their initial stages are (1) a bibliography of pertinent literature; (2) a preliminary regional outline of the United States in terms of the similarity of major land use and related patterns; and (3) a discussion of the technical aspects of this regional approach.

2. Land Classification Methods and Techniques.—The increasing emphasis upon wise land use has created a need for the development of methods and techniques of land classification which will aid in determining what wise land use actually is for specific land areas and tracts.

A major project of the Division is the development of land-classification methods, materials, and techniques. This includes research in and review of theoretical concepts, and practical procedures, materials, methods, and techniques. Some projects, such as the one in Frederick County, Md., are undertaken with the express purpose of studying and comparing the various methods and techniques as they operate in the same area. In other projects, undertaken for other

reasons and usually undertaken in cooperation with other divisions and agencies, particular attention is given to techniques and methods as the projects progress.

Special attention has been and will be given to assisting the county planning program, which is now being carried on jointly by the Bureau of Agricultural Economics, the Extension Service, and the land-grant colleges. Such assistance is given both at the State level in consultation with the State BAE representative and the county planning project leader, and at the county level by actual participation in the county planning activities.

Water Utilization Research and Planning

For the arid and semiarid parts of the country where water is of major importance to effective land use, studies are being made to improve the use of water in relation to land use for agriculture. Over-all plans are developed for the guidance of operating phases of the Water Facilities Program of the Department of Agriculture. Research in methodology of water utilization planning for agriculture is being conducted, and water-land-use problem areas are being studied to develop a comprehensive compilation of water-land-use problems which relate to agriculture throughout the arid and semiarid parts of the West.

Division of Farm Population and Rural Welfare

The Division of Farm Population and Rural Welfare through its field staff and the personnel of its Washington office contributes directly to the Agricultural Planning Program. It collects and interprets data in its field and makes them available to local, State, and national planning agencies; it assists local committees as well as State institutions in gathering and interpreting pertinent data. Throughout its work the emphasis of this Division is upon the people, their institutions, attitudes, and customs and their standards of living, all of which are basic to any agricultural program.

In the unified, as well as in intensive and preparatory county programs, the Division emphasizes: (a) Population—the number, characteristics, distribution, and migrations of the rural population of areas affected and the relation of population to natural resources, and the possibility of providing a livelihood for the present and future populations in the area; (b) the nature and extent of the local communities through which planning activities are to be developed and carried on and the role of local organizations as well as the development and functioning of local leadership; (c) the levels of living which prevail and the variations in the levels of living within the areas af-

fects; (d) the relations of owners, tenants, and farm laborers, and the effects of prospective adjustments upon each of these groups; (e) the problems of low-income and dependent farm families and the effectiveness of agencies designed to aid them, such as Farm Security Administration, public welfare, etc.; (f) the attitudes of farm and other rural people toward agricultural programs and the characteristics of the public-opinion-making agencies which reach them; and (g) the habits, customs, and beliefs of rural people as they affect the development and execution of planning in any given locality or in general.

A major activity with relation to local planning is the assistance given to county committees and others in locating and analyzing the functional local groups (neighborhoods and communities) through which planning at the local level can operate most effectively. These reflect clearly the desires and understanding of the people, and provide a basis for effecting action agreed upon by the committees.

Division of Farm Management and Costs

The work of the Division of Farm Management and Costs is concerned with problems relating to the internal economy of the farm and ranch, and the interrelationships between the economy of individual farms and that of local areas, regions, and the Nation as a whole. The Division approaches its work in terms of the economic welfare of all farm groups in the area under study. It contributes directly to the agricultural-planning program by collecting and analyzing primary and secondary data that will indicate income expectancy by the types and sizes of farms in each local area that are most likely to provide a living for the farm family and to maintain the farm plant. The reasons for present maladjustments in an area are ascertained by working in cooperation with community and county planning committees and adjustments to be recommended are determined. The steps which can and should be taken in making recommended adjustments are outlined in as much detail as possible. Often they involve both individual and group action. Follow-up studies are made to appraise the effects on farming of the adjustment programs that are developed. The net effects of those adjustments which are carried out are ascertained.

The need for the objective determination of the probable results of any program in terms of human and physical resources is within the scope of farm-management analysis. The first step in such procedures is the delineation of farm plans or budgets which are drawn up on a long-time basis. These budgets are invaluable as a background for committee recommendations. Such plans contain cost, price, and income data,

most of which are obtained from farm operations within the particular area concerned. A comparative analysis can be made from a careful study of these budgets. Such analyses can be used in determining the most economical types of farming, in accordance with the available land, topography, soils, climate, and people.

The budget approach is extremely flexible and is particularly adapted to the cooperative efforts of technicians and farm-planning groups. In addition to local assistance, farm-management workers may also assist local planning groups in their efforts to see the relation of local problems to the national scene. In acutely distressed areas, an analysis may be used to determine those necessary adjustments which will be least expensive but effective in dealing with social problems.

Local Planning Data and Information Available

In fulfilling its responsibility for planning, the Bureau of Agricultural Economics encourages the formulation and conduct of research activities by other agencies within the Department of Agriculture and by State agricultural colleges, which are directed to the development of information of value for planning purposes. The Bureau gives financial assistance to State agricultural experiment stations in the conduct of research work of this nature and in the compilation and tabulation of existing data and information in a form useful to State and Local Planning Committees. Special studies will be conducted from time to time which will be designed to aid in improving techniques and procedures of the agricultural planning process, and in encouraging wider farmer participation in agricultural planning and greater official recognition of the importance of local planning committees. Procedures formulated by the Bureau for the conduct of planning work at the various levels—county, area, State, and regional—are available for distribution as issued. Reports of county land-use planning committees, and accompanying maps, are not generally available in quantities sufficient for distribution. As a rule, these reports and maps may be inspected at local and State offices of the State Agricultural Extension Service, or at the office of the Division of State and Local Planning in Washington.

Printed Publications: Washington, D. C., 1938. This list includes all printed bulletins of the Bureau of Agricultural Economics issued from July 1922 to February 1938. Current market reports, mimeographed periodicals and other publications are listed in "Agricultural Economic Reports and Publications of the Bureau of Agricultural Economics." A copy of this list will be sent upon request to the Bureau.

EXTENSION SERVICE

FEDERAL ACTS

Smith-Lever Act of May 8, 1914
Clarke-McNary Act of June 7, 1924
Hawaii Extension Act of May 16, 1928
Capper-Ketcham Act of May 22, 1928
Alaska Extension Act of Feb. 23, 1929
Puerto Rico Extension Act of Mar. 4, 1931

Bankhead-Jones Act of June 29, 1935
Capper-Ketcham Act to Alaska, June 20, 1936
Cooperative Farm Forestry Act of May 18, 1937
Bankhead-Jones Act to Puerto Rico, Aug. 28, 1937
Further Extension Development Act of April 24, 1939
Annual Department Appropriation Acts

STATE ACTS

Enabling Acts of the Several States
State Appropriation Acts to State colleges of agriculture
Acts for cooperation with farmers' organizations in extension work
Acts empowering county governments to appropriate money for county extension agent

COUNTY ACTS

Appropriations by the several counties for the employment of county extension agents in cooperation with the State agricultural college and the Department of Agriculture

Brief General Statement of Agency Functions

Cooperative extension work in agriculture and home economics is a Nation-wide system of agricultural education based on acts of Congress, Federal grants-in-aid to the States, and supporting State legislation and State and county appropriations for the cooperative maintenance of the extension system.

The work of the Extension Service is carried on through cooperation between the Department of Agriculture and the State agricultural colleges, which maintain a definite and distinct administrative division for the management and conduct of extension work. All funds for extension work are administered through these divisions.

Extension agents are official representatives of the United States Department of Agriculture and of the State colleges of agriculture in the educational phases of activities projected by these agencies. These agents are not authorized nor do they perform for individual farmers or for organizations actual operations of production, marketing, or organization. They do not act as organizers of farmers' associations, conduct membership campaigns, solicit membership, edit organization publications, manage cooperative business enterprises, engage in commercial activities, act as financial or business agents, or take part in any work of farmers' organizations.

Activities Affecting and Assistance to Local Planning

The Extension Service is today operating in three general fields:

1. *Information on Agricultural Production and Home-making.*—Unplanned work.

- (1) Individual problems.
- (2) Emergency problems.
- (3) Seasonal and current information.

2. *Action Programs.*—In these fields of action programs, the extension agents representing the Federal Government lead the people locally to think in terms of national problems, and help interpret these national programs for agriculture in terms of local conditions by assisting in the making of local plans. These national programs are concerned with: The maintenance and restoration of soil fertility; a more stable supply of farm products; more stable prices for farm products; more stable farm incomes; a share of the national income for balanced economy; a higher percentage of individual farm ownership; greater security of tenure; the encouragement of democratic processes in national programs.

The experience of the Extension Service in Labette County, Kans., in 1937, exemplifies the type of local plan which relates to the above national programs and in the formulation of which the Service plays an active part. In this county, the county planning committees set up by the Extension Service developed recommendations for an agricultural program in the county with particular reference to (1) the conservation of agricultural resources, and (2) needed adjustment in livestock and crop enterprises. The supervisors of a soil conservation district, organized in the county the following year, adopted these recommendations of the County Planning Committee as the program for the Soil Conservation District.

Brown County, Ind., serves as another example. For many years, the county agent, on the recommendation of his County Program Committee and with the assistance of Purdue University, carried forward an educational program on the opportunities for forestry in the county. This work included the organization of the first 4-H Forestry Club in Indiana. As a result of these efforts, a demand rose in the area for a land-purchase program which would retire from use a portion of the marginal agricultural land and make it available for county, State, or national forests. This was one of the first land-purchase areas in the State of Indiana.

(3) *Agricultural Policy Formulation and Program Planning*.—The Extension Service has the responsibility of developing the systematic participation of farm people in studying land-use situations and problems with representatives of the State agricultural colleges and the Department of Agriculture. It aids in the determination of land-use programs and plans which are correlated with the suggestions and work of the farmers. In this way the Department and colleges can make the most effective contribution to agricultural adjustment, conservation, crop insurance, farm forestry, flood control, land retirement, rehabilitation, water utilization, and the land-use implications of community facilities, credit, marketing, public finances, land taxation, tenancy, and transportation.

The county extension agent acts as leader in organizing county and community planning committees. A farmer is chairman of each committee. County representatives of other bureaus and agencies of the Department of Agriculture are members of the county committees. Every effort is made to provide farmer members of the committees with the best information available to guide them in developing general recommendations. These recommendations do not usually include administrative procedures. Since county representatives of the different bureaus of the Department of Agriculture are members of the committees and participate in the development of the program, they are familiar with the recommendations from the beginning. The reports are channeled through the State committees of which the State director of extension is chairman, then through the Extension Service, to the Bureau of Agricultural Economics, and subsequently to the different bureaus concerned.

The State Extension Service has its headquarters at the State agricultural college in every State and in Hawaii, Puerto Rico, and Alaska. The personnel organization of the Service consists of the following, as of April 30, 1940:

State directors.....	51
Assistant directors.....	49

County agent supervisors.....	202
Home demonstration supervisors.....	152
4-H Club supervisors.....	182
Specialists.....	1,643
County agents.....	2,946
Assistant county agents.....	975
County home demonstration agents.....	1,849
Assistant home demonstration agents.....	169
County club agents.....	270
Assistant county club agents.....	50
Negro county extension men.....	289
Negro county extension women.....	220
Negro county extension club agents.....	2
Total.....	9,029

During the fiscal year ending June 30, 1940, approximately \$6,427,177 was expended by the States and colleges, and \$3,665,402 by the counties. Farmers' organizations within the States expended \$1,087,086, making a total of \$14,179,675 utilized within the States. Federal funds expended amounted to approximately \$18,470,593.

The larger aims in Extension education are in general similar to those of formal education. They guide extension workers and rural folk in defining local problems and in developing programs related to the needs of the people. Extension education seeks:

1. To raise and stabilize farm incomes through national programs of agriculture; through local farm organization and farm and home management adjustments; and through improvement in farming and homemaking practices.

The keeping of farm and home accounts is a major project of Extension work. By means of these accounts and a large number of farm-management surveys, recommendations are made to individual farms and homes for adjustments in farm business and farm budgets, which will aid in raising the income of farm people. The Extension Service is constantly aiding cooperatives and farmers generally in improving their marketing situations. Moreover, every agricultural extension activity aims to help farmers with certain production problems and an improvement of practices which directly affect returns. The variety of these recommendations is very great and covers a whole field of major agricultural activities.

2. To improve rural health by means of dynamic programs drawn for each specific local need. Since health is vital in rural homes, women and girls are taught standards of positive health; home care of the sick; emergency aid; home sanitation; the relation of food, clothing, and posture to good health; and matters of community health, such as prevention of spread of contagious diseases. Community meals are selected on a basis of nutritional needs; school-playground equipment is obtained; and hot school lunches and proper sanitary conditions in the rural schools are provided.

3. To improve rural home and family life. In St. Louis County, Minn., 20 groups with 228 members were organized to study problems of farm family life. Four series of meetings were held. Leaders of each of the 20 groups were trained with the assistance of a child-study specialist. These leaders in turn conducted community meetings on (1) personality development, (2) character growth, and (3) helping children to help themselves.

4. To assist rural youth in obtaining better cultural and vocational preparation for life. The reports of Extension agents show that in 1939 there were 78,599 boys' and girls' 4-H Clubs organized in the country, with 599,420 boys and 782,175 girls participating in project activities.

5. To assist in meeting the social and civic problems of rural communities. Home demonstration work stimulates rural women to initiate and carry on activities which contribute to neighborliness, community satisfaction and civic efficiency. Through the united efforts of rural women, highways and rest rooms are provided, and community recreation and social activities sponsored.

6. To maintain and improve standards of ethical culture. Both with adult and young peoples' groups, Extension specialists and agents are developing wider discussions and a greater appreciation of some of the factors which make for higher values in rural living. An example of such work is the State short course for 4-H boys' and girls' clubs, conducted by the Extension Service at the Virginia Polytechnic Institute in September 1939. Groups of boys and girls heard topics relating to cultural living discussed by prominent leaders, and then entered into relative discussions themselves.

7. To improve folk life and develop more wholesome recreation. Recreation in the Extension program embraces a wide field of activity, including dramatics, music, reading, games within the home and for the community, folk dancing, and general community recreational activities. Emphasis has been placed on recreation for the family.

The staff of the Federal Extension Service, in closest cooperation with State and county extension workers, assists in carrying on and perfecting local planning procedures. Such extension work is based on first, local programs of work which are developed in terms of major needs by joint analysis and agreement between the local farm people and the extension workers, and second, plans for carrying out these programs under local farm leadership.

In making these programs and plans, the research and subject-matter information of the State college and the Department of Agriculture which bear upon the problem is available to the local planning groups. In States, of which New York, Iowa, and Kansas are typical, the County Farm Bureau Executive Board is designated by State law as the local cooperating group with which the Extension Service plans its work. In some States, like Wisconsin, the county appropriating body, in this instance the County Board of Supervisors, appoints an agricultural committee which is the program planning committee cooperating with the Extension Service. Both of these committee types are legal bodies. A third type of cooperating body utilized in many States is the voluntary committee, usually appointed by the county agent which assists in developing extension plans and programs by county. In the formulation of this type of committee, an attempt is made to have members of the committee represent the varied agricultural interests of the county, including the commercial interests dependent upon agriculture. Indiana is typical of the States using this type of local coopera-

tive organization. Local officials, such as the county commissioners and county superintendents of schools, are usually represented on these voluntary committees.

By means of local study, in which farm and home leaders participate, the technical information of the colleges and the Department is blended with the results of such local study to meet peculiar local situations and needs. Such local effort is usually conducted annually by county and community groups of farm people, and includes planning to meet farm problems, problems of home management and improvement, family living, and work with rural boys and girls in 4-H Clubs.

The effectuation of these plans thus developed at the local level, constitutes the major activities of the county extension agent. At the State level, these county programs and plans are incorporated into the State plan of work of the State extension specialists and the supervisors of the county extension agents. Such State plans of work are submitted annually to the Federal Extension Service for review and approval. State plans may involve cooperative effort between different bureaus of the Department of Agriculture or between departmental bureaus and outside agencies. If the plans are concerned with various units of the Department of Agriculture, planning becomes a joint affair. In the last few years, this type of joint planning has been carried so far that the plans themselves have been approved and signed by representatives of other agencies and subsequently the State and Federal representatives of the Extension Service. Thus, in the Land Use Planning Project Agreement, three agencies, the Bureau of Agricultural Economics, the State Extension Service, and the State Experiment Station join in developing the Land Use Planning work under a State committee, in accordance with the plan developed in the State and approved in Washington, and accepted by the Federal Extension Service as a plan of work for Land Use Planning.

The extent of this planning with local groups and the number of volunteer leaders cooperating in planning and advancing local extension programs is shown below for 1939.

	Number	Counties reporting
County associations fostering extension work.....	6,833	2,618
Membership in these associations.....	572,089	2,552
Number of communities in counties.....	79,750	2,967
Communities with extension program.....	64,555	2,773
Voluntary local leaders:		
Men leaders in adult work.....	237,933	2,615
Women leaders in adult work.....	238,535	2,576
Men and women leaders in 4-H Club work.....	104,092	2,708
Boy and girl leaders in 4-H Club work.....	43,258	1,794

State and local planning for the participation of local people in the national agricultural program is

likewise carried on in cooperation with State and local committees of the A. A. A., the State and district soil conservation committees, or representatives of the various other national agricultural programs.

Cooperation with national agencies in planning and carrying on their programs in 1939 is as follows:

	Counties report- ing work	Communi- ties in which work was con- ducted	Voluntary local leaders or committees as- sisting
Agricultural Conservation.....	2,824	53,505	42,031
Soil Conservation Service.....	1,390	11,704	10,834
Farm Security Administration.....	1,089	15,345	5,062
Rural Electrification Administration.....	1,078	15,723	21,945
Tennessee Valley Authority.....	849	3,474	3,339
Works Progress Administration.....	472	3,215	1,621
National Youth Administration.....	603	2,596	693
Social Security Board, Public Health Service, and Children's Bureau of Labor Department.....	330	2,607	2,031
Other Federal Agencies.....	527	3,626	2,315

Of greatest significance is the land-use planning work now being developed in cooperation with the Bureau of Agricultural Economics. In this planning, the same general principles are observed as have been followed in extension work for some years in developing extension programs. Community, county, and State committees of farm men and women are organized which, after they have mapped local land-use situations and studied land-use needs and possible readjustments, make recommendations, in cooperation with representatives of the State agricultural college and the Department of Agriculture, for the correlation and localization of the national programs and adjustments in land use and in the types of farming which can relieve problem situations. This planning involves not only the determination of adjustments significant for the individual, but also of policies of public import. Examples of this last are the land-use zoning or land classification which has been carried on in Wisconsin and New York, and which has resulted in the withdrawal of huge acreages from farming.

The Director of Extension is chairman of the State Land Use Planning Committee, which includes in its membership the State representative of each of the national programs carried forward by the Department of Agriculture. County agents usually serve as secretary to the County Land Use Planning Committees, act as leaders in organizing the committees, and assist in the work of mapping the land use areas of the county through community committees. At the State level,

the State extension project leader is usually a technical man who, in cooperation with the State representative of the Bureau of Agricultural Economics and the representative of the State experiment station, brings to the farmers' committees technical information necessary in land-use studies and in the development of recommendations for adjustment in land use determined by the committees.

Local Planning Data and Information Available

1. *Planning bibliographies.*—Probably every State extension service publishes material on planning from time to time. The land-use zoning circulars of Wisconsin, the (1) county conference board programs, and (2) the county land classification circulars of New York, the county program bulletins in Maine, the county program circulars of Oregon are examples. In addition to the State publications the Federal Extension Service has issued circulars from time to time.

2. *Planning information.*—There are on file in the office of the Federal Extension Service the annual State plans of work, which cover every major activity of the several State extension services, including plans of specialists and supervisors of the county extension agents. These are supplemented by annual statistical and narrative reports from each specialist, county agricultural agent, home demonstration agent or county 4-H Club agent.

A partial list of Extension Service publications available (mimeographed):

Extension Service No.	Title	Date
236	The farm family as the unit for extension work.....	February 1936
238	The income approach to extension programs.....	March 1936
280	Planning county agricultural extension programs.....	April 1937
265	Aims and objectives of home demonstration work.....	June 1937
268	Plans versus projects.....	July 1937
290	Articulation of the extension and other action programs.....	August 1938
302	Coordination of agricultural programs.....	February 1939
306	Two trends of great agricultural significance.....	June 1939
308	Agricultural progress in the South.....	April 1939
310	Twenty-five years of extension work under the Act of May 8, 1914.....	May 1939
311	Population trends in relation to land use.....	June 1939

FARM CREDIT ADMINISTRATION

Federal Farm Loan Act of 1916, and Amendments
Agricultural Marketing Act of 1929, and Amendments
Emergency Relief and Construction Act of 1932 (Section 201e)
Executive Order No. 6084
Emergency Farm Mortgage Act of 1933, and Amendments

Farm Credit Act of 1933
Federal Farm Mortgage Corporation Act of 1934
Farm Credit Act of 1935
Federal Credit Union Act of 1934
Farm Credit Act of 1937
Reorganization Plan No. 1, 1939

General Introductory Statement

The Farm Credit Administration has under its supervision a nation-wide system of permanent agricultural credit units, and in addition a number of emergency and other credit organizations. Its general purpose is to make available to farmers both short- and long-term credit on terms adapted to the character of the farm business and at rates as low as the cost of credit and the cost of operation of the agencies will permit. It also provides credit facilities for farmer's cooperative marketing, purchasing, and business service organizations. The Governor of the Farm Credit Administration reports to the Secretary of Agriculture.

The various Farm Credit units have the obligation of adjusting the size and terms of each loan to the needs of the borrower. Depreciation of the farm capital and discouragement of the farmer-borrower, as well as losses to the cooperative credit unit, would result if large loans were made on the less productive farms; while on very productive farms loans often must be of considerable size to be of service in the economical operation of the business.

The intermediate credit banks discount eligible agricultural paper for production credit associations, banks for cooperatives, and privately owned lending institutions. These banks obtain the bulk of the funds used for such purposes by selling collateral trust debentures to the public. Thus, the banks act as wholesalers of short-term and intermediate agricultural credit. The intermediate credit banks do not make loans directly to farmers.

Brief General Statement of Agency Functions

For the purpose of making agricultural credit available to farmers, the country is divided into 12 Farm Credit districts. There is a Federal land bank, a Federal intermediate credit bank, a production credit corporation, and a bank for cooperatives in each district. All four institutions operating in each district are located in the same city and building. Offices of the emergency crop and seed loan organizations, with three exceptions, also are located in these 12 regional executive centers.

Farmers in each Farm Credit district have access to farm mortgage loans through their local national farm loan associations. These local mortgage-credit cooperatives handle Federal land bank and Land bank commissioner loans. Federal land bank loans are made for the purchase of land for agricultural uses; for the purchase of equipment, fertilizers and livestock necessary for the proper and reasonable operation of the mortgaged farm; for providing buildings, and for the improvement of farm land; to liquidate indebtedness of the owner of the mortgaged land incurred for agricultural purposes, or incurred prior to January 1, 1937; and to provide the owner of the mortgaged land with funds for general agricultural uses. Commissioner loans may be made for the same purposes, and in addition may be used to refinance any indebtedness of the farmer in connection with the proceedings under chapter VIII of the Bankruptcy Act without regard to the purpose or time of incurrence of the indebtedness.

Farmers obtain loans for crop and livestock production from their local production credit associations. These short-term credit cooperatives are supervised by the production credit corporation of the district. Production credit loans may be used for general agricultural purposes, including the production of crops and livestock and the repair and improvement of farm equipment and buildings, and for refinancing indebtedness incurred for agricultural purposes.

Farmers' marketing and purchasing cooperatives may borrow money from the district bank for cooperatives. Loans are made for the purpose of financing the handling of readily marketable commodities and otherwise assisting cooperative associations in their general operations, and for the purpose of aiding them to acquire, by construction, purchase, or lease, adequate physical facilities. A Central Bank for Cooperatives extending credit to large regional or national cooperatives is located in the Washington office.

Activities Affecting and Assistance to Local Planning

District Farm Credit agencies, with the cooperation of the Economic and Credit Research Division of the Farm Credit Administration at Washington, have on

occasion cooperated with other agencies and bureaus in the United States Department of Agriculture and with State agricultural experiment stations in studies of land utilization, classification, and agricultural credit. More than a dozen such studies, each covering one or more counties, have been or are being made.

Advice relative to such studies and their possibilities can be procured from the Economic and Credit Research Division of the Farm Credit Administration in Washington, and from the district statistician or district director of research in the district where a study is contemplated.

The loan committees of the National Farm Loan Association and local production credit associations exercise a degree of supervision over the extension of mortgage loans and short-term credit and thus assist in adjusting the size and the terms of loans to the needs of members. While they do not regularly participate in local planning as such, they are concerned and interested in any rural zoning or local land-planning classification.

The personnel and funds available for use in cooperative studies are strictly limited. The Economic and Credit Research Division generally confines its cooperation to the lending of expert personnel for use in preparing sample studies of importance in aiding credit units to adjust their loans to the needs of farmers.

Local Planning Data and Information Available

Bibliography

List of publications available from the Farm Credit Administration. No publications on this list relate directly to local planning, but certain of them may be of value to local planning agencies as general background, for the purpose of familiarizing themselves with the functions of the Farm Credit Administration. Cooperating agencies may publish their own reports of cooperative studies of land utilization, classification, and agricultural credit, making use of data furnished by the Administration, only under conditions agreed upon in advance of study.

✓ FARM SECURITY ADMINISTRATION

Emergency Relief Appropriation Acts
Bankhead-Jones Farm Tenant Act of 1937 and Supplemental Legislation
Water Facilities Act of 1937

General Introductory Statement

The Farm Security Administration makes credit and technical farm management information available to low-income families engaged in agriculture. Its purpose is to enable farmers on or near relief to become self-supporting.

The loans and technical assistance offered by the Farm Security Administration are extended to low-income families upon the basis of individual farm and home management plans.

Such a plan is worked out by the client family at the beginning of each crop year during the period of cooperation between the family and the Farm Security Administration. It is worked out with the aid of the local F. S. A. personnel trained in the agricultural colleges, experienced in local farming practices and guided by administrative staffs in Regional offices and in Washington. It may include any phase of family activity bearing upon the family income or standard of living.

✓ This planning has been total planning for a small segment population rather than segmental planning for the total population, a more common type of planning in Government.

The Farm Security Administration is an action agency. Its current research activities extend no further than the simple accountings necessary to the functioning of administrative controls. Under the terms of the recent Departmental Reorganization of the Department of Agriculture, it has turned over to the Bureau of Agricultural Economics the prerogatives of academic research. For the general economic information behind policy and the formal analyses of results under various phases of its program, the Farm Security relies on the Bureau of Agricultural Economics.

Brief General Statement of Agency Functions

✓ It is the policy of the Farm Security Administration to extend help to needy farm families unable to obtain adequate aid from any other source; its primary concern is the rehabilitation of the bottom third of the farm population.

In helping this low-income farm group to attain relative economic and social security, the Farm Security Administration has accepted the individual family and its landhold as the basic unit for planning and action.

The various phases of the F. S. A. program are designed to assure the family an opportunity to help itself.

by making physical and educational equipment available to them upon a reasonable basis.

All the planning phases of F. S. A. action are focused in the making of farm and home-management plans for the basic family unit. In these plans an attempt is made to express the national, regional and area policy of the Farm Security and, within this framework, to express an individual family program.

✓ The F. S. A. program attempts to point a way out for what is, in terms of restricted market demand for farm products, a surplus farm population. In the absence of alternative employments for its borrowers who are largely, as evidenced by their eligibility for F. S. A. aid, those families which have lost out in the market competition which marks the agricultural industry, the Farm Security Administration has fostered:

1. A partial rechanneling of the energies of its client farmers into spheres of activity which produce real income independently of the competitive cash crop markets, through home production of food and feed requirements.

2. Diversification of cash income sources, and

3. A generally greater efficiency in all directions through the provision of better equipment, encouragement of land conservation and improvement, and instruction in efficient farm methods and farm management.

Regional and area policy attempt to adapt national policy, by variations of emphasis, to the special needs of the locality involved. In the High Plains, for instance, where drought contributes to insecurity, special emphasis is laid on conserving water, restoring soil and expanding acreage. In the South where one-crop cotton farming puts the income of a major part of the farm population in jeopardy with each change in the extremely uncertain market, special emphasis is laid on diversification of cash crops and expansion of subsistence acreages.

Decisions as to the individual family program within this general framework are based upon first-hand investigations of the specific capacities and needs of the particular farm and family to be planned for.

✓ The financial phases of the F. S. A. program, the loans, credit adjustments, and grants are designed to equip the family to carry out the farm plans. Farm and home management planning precedes all financial action. A loan docket must include a copy of a farm plan and this plan must be carried out under the loan.

Activities Affecting and Assistance to Local Planning

✓ The action program of the Farm Security Administration assumes several phases:

✓ 1. *Standard Rehabilitation Loans.*—These loans are made to farmers who need seed, tools, livestock and other equipment necessary to carry on farming operations, and who cannot get credit elsewhere. Every applicant must have land which will support his family

and produce enough income to repay the loan. If he does not own the farm, he must have a satisfactory lease or purchase contract.

Standard loans are repayable over a period up to 10 years at 5 percent interest. The borrower signs the note for the amount of the loan, which is secured by a chattel mortgage on livestock, machinery, and crops. Each borrower agrees to keep businesslike records and to follow a sound farm-and-home-management plan, which he works out with the F. S. A. rehabilitation supervisor for his county. This plan usually calls for the production of enough staples to feed the family and enough feed and forage crops to provide for the livestock. Ordinarily it also provides for at least two cash crops. The county supervisor is glad to advise the borrower on crop rotations, erosion control, livestock and equipment purchases, marketing, and other farm problems.

✓ 2. *Emergency Rehabilitation Loans.*—In areas stricken by drought, flood, hurricanes, or in other unforeseen emergencies, farmers often need small loans quickly to save their crops or provide feed for their livestock. In such cases the Farm Security Administration provides limited sums immediately, without taking time to draw up a farm-management plan.

✓ 3. *Community Service Loans.*—When a group of low-income farmers need equipment or services which no single one of them can afford by himself, the Farm Security Administration makes a cooperative or community service loan to the group. In this way, farmers in the same neighborhood can unite to buy necessary equipment.

Since these loans are intended to help in the rehabilitation of low-income farmers, most of the members of the group are usually standard rehabilitation borrowers.

Loans are also made to individual farmers to enable them to take part in existing cooperative associations not financed by the Farm Security Administration. In this way, low-income farmers can get the benefit of cooperative organizations in their neighborhood.

✓ 4. *Medical Aid Loans.*—Frequently farmers have difficulties in making ends meet because of sickness in their families. In many counties, local medical associations have helped organize group health programs to provide medical care for low-income farm families at a cost which they can afford. Wherever such programs are in operation, Farm Security Administration is willing to loan money to enable farm families to take part in them, if such service is necessary to their rehabilitation.

✓ 5. *Loans for the Development of Small Water Facilities.*—These loans are available in the 17 western arid States for the installation or development of small

water facilities, where such loans would contribute to rehabilitation.

6. *Tenant Purchase Loans.*—Congress has authorized the Farm Security Administration to make a limited number of loans each year to help tenants, sharecroppers, and farm laborers to buy land of their own. These loans are made only in certain counties designated by the Secretary of Agriculture, on recommendation of the State F. S. A. advisory committee. Ordinarily these are counties in which tenancy is most widespread or is growing most rapidly. Tenant purchase loans are large enough to enable the borrower to buy a farm and, if necessary, to repair his physical plant. They are repayable over a period of 40 years at 8 percent interest.

County committees each consisting of three farmers, decide which applicants shall receive loans, on the basis of character, ability, and farming experience.

7. *Farm Debt Adjustment.*—For farmers overburdened with debt, the Farm Security Administration provides a means by which their debts can be adjusted to their capacities to pay. It is available to all farmers, whether or not they take part in other phases of the F. S. A. program.

A local farm debt adjustment committee meets with the debtor and his creditors for discussion of their mutual problems. Often it is possible to reach an agreement for extending the time of payment, scaling down the debt, or refinancing part of it through a F. S. A. rehabilitation loan. In this way the farmer is saved from foreclosure, and the creditors get substantial payments on what might otherwise have been bad debts. Similar adjustments are made on group debts, such as those incurred under irrigation or drainage contracts. These committees have no legal authority.

8. *Tenant Improvement.*—Since money is not available to help all tenants become farm owners, the Farm Security Administration is attempting to eliminate some of the worst evils of the present tenancy system. In cooperation with State agricultural colleges and other local agencies, it is encouraging better leasing arrangements for the 2,865,000 families who are working as tenants and sharecroppers. Emphasis is placed on long-term or renewable contracts and on agreements which will encourage the tenant to protect the soil and improve the property.

9. *Homestead Projects.*—The Farm Security Administration has completed about 164 projects, which provide homesteads for more than 15,000 farm families. Some of the projects were set up in exhausted mining or lumbering areas to provide a livelihood for families who might otherwise have been permanently dependent on relief. Others were established to demonstrate better methods of farming and economic organization.

10. *Camps for Migrant Farm Families.*—During the last 10 years, thousands of families—particularly in the

"Dust Bowl"—have been forced off the land by drought and dust storms. In addition, many thousands have been forced to move because of the large extent to which machinery has been substituted for human labor. The greatest numbers of these have found their way to the West Coast States, the Rio Grande Valley, and certain sections of Florida. They seldom have homes other than makeshift camps, without sanitary facilities or proper water supply. Frequently, such camps constitute a health menace, both to the migrants themselves and to the communities in which the camps are located.

To help remedy this situation, the Farm Security Administration has built or is building 32 migratory labor camps along the west coast and in other areas. They consist of tent platforms, sanitary facilities, and sometimes a clinic or school. They are open to all migrant families within the limits of their capacities. Residents contribute a few hours of labor weekly to the upkeep of the camp and pay a small rental.

11. *Grants.*—In case of extreme need, the Farm Security Administration makes small grants to farm families for the purchase of food, fuel, and other urgent necessities. Ordinarily grants are made only in areas stricken by drought, flood, or other disasters, where immediate aid is needed to prevent starvation.

Grants under these various types of loans are classified under two main headings, (1) Tenant Purchase Loans, and (2) Rehabilitation Loans. Several of the 11 types of loans and grants outlined may be included in either a tenant purchase loan or rehabilitation loan. The F. S. A. is authorized to borrow \$50,000,000 from the Reconstruction Finance Corporation to make additional Tenant Purchase Loans during 1940-41, and to borrow \$125,000,000 from the same source for its rehabilitation loan program. The Tenant Purchase funds will extend the program to many new counties in addition to the 1,289 in which loans are being made under past appropriations. The rehabilitation program has reached practically all the nation's 3,071 counties.

The importance of the Farm Security Administration's far-flung action program to local planning is emphasized by the fact that in some States the Administration is financing almost one-half of the farm population. The program affects local relief loans; farm management patterns; tenure arrangements; land-use practices; credit rates, conditions, and agencies; educational achievements; diet, sanitation and health; community organization; housing, techniques of cultivation; crop and acreage distributions; types and quantities of equipment; stability of residence; routes of migration and patterns of labor employment.

F. S. A. personnel is available and equipped to participate in local or area planning wherever it is undertaken. The personnel is in a position to put such planning into immediate effect through the medium of

the farm and home plans which Farm Security makes for and with its borrowers.

These plans, drawn up in conference between the farmer and the F. S. A. farm supervisor, have proved the most usable convention for achieving action coordination with allied agencies and planning authorities.

F. S. A. supervisors are ex-officio members of the county land-use planning boards being established under the guidance of the Bureau of Agricultural Economics and Soil Conservation Service of the Department of Agriculture. There are approximately 15,000 field employees of the Farm Security Administration. This includes county rehabilitation and home supervisors, regional and all State office employees.

Exemplary of possible F. S. A. local planning relationships, is the experience of the Farm Security Administration in Coffee County, Ala., where county planning has been advanced further than in most regions. The Farm Security Administration is represented on an unofficial but functioning local planning agency composed of representatives of county, State, and national agencies functioning in that county. Here the planning agency, known as the county council, was formed after the State department of agriculture and the State department of education had cooperated with the Resettlement Administration, predecessor of the Farm Security Administration, in surveying the land resources and educational facilities of the county. The county council encouraged the inauguration of an adult education program, and the improvement of existing school facilities. In cooperation with the council, the Farm Security Administration shaped its program to establish needy families on better land in the county, so that the poorer land could be used for range and grazing purposes. Substantial low-cost houses were built to replace the most inadequate shelters. Working with other agencies, the Farm Security Administration helped to reforest or plant for pasture many submarginal areas,

diversify crops to halt erosion, enlarge farm units, and generally put the resources of the county to their best use. A number of cooperatives were financed by the Farm Security to aid in the rehabilitation of the families. The county council and county commissioners are giving careful consideration to tax, road, school, and public-service problems in order to avoid encouraging settlement in the remaining submarginal areas. The county health program was expanded and supplemented with a group health program under F. S. A. financing. The Farm Security was even able to aid the council in forwarding the recreational and social life of the community, by developing a recreational lake, camping grounds, and large picnic area in the central part of the county, accessible to all.

Local Planning Data and Information Available

Selected List of Publications

1. Farm Security—The Work of the Farm Security Administration. A brief summary of the services available to farmers through the Farm Security Administration.
2. The History of the Farm Security Administration.
3. Co-ops for the Small Farmer.
4. The Medical Care Program for Farm Security Administration Borrowers.
5. Farm Tenant Loans.
6. Designated Counties for Tenant Purchase Loans.
7. Report of the President's Committee on Farm Tenancy.
8. Helping the Farmer Adjust His Debts.
9. The Flexible Farm Lease.
10. Homesteads. Discussion of the rural communities, scattered farmsteads, and subsistence homesteads of the Farm Security Administration.
11. Greenbelt Communities. Present size and plans of operation for the three low-rent communities constructed by the Farm Security Administration.
12. Migrant Farm Labor: The Problem and Some Efforts to Meet It.
13. Rural Planning for More Workers.
14. An Example of a Farm and Home Management Plan.
15. Report on Economic Conditions of the South. (Prepared for the President by The National Emergency Council.)

FOREST SERVICE

Forest Reservation Act of 1891.
Organic Administration Act of 1897.
Transfer Act of 1905.
Forest Homestead Act of June 1906.
Weeks Act of 1911.
Clarke-McNary Act of 1924.
McSweeney-McNary Act of 1928.

General Introductory Statement

Land-use planning has had much to do with the success of the various programs directed by the Forest Service. Since the beginning of the present Forest Service in 1905, dependence has been placed on local

Knutson-Vandenberg Act of 1930.
Fish & Game Sanctuary Act of 1934.
Agricultural Research Act of 1935.
Fulmer Act of 1935.
Flood Control Act of 1937.
Cooperative Farm Forestry Act of 1937.

planning groups in the form of advisory boards and committees and other organizations of local citizens to assist in developing and guiding policies of the Forest Service with respect to national forests. Similar groups have helped to develop the present forest research pro-

gram and in cooperation with the various states other forestry-conscious local organizations have helped to develop a national, state, and community forest system and an effective system of fire protection. A good example of local planning sponsored by the Forest Service is the 748 local grazing advisory boards, composed of users of the national forest range, organized cooperatively to advise the Forest Service on national forest range administration, including such matters as the distribution of livestock, range improvements, grazing fees, etc. Wherever possible the same principle is applied to other users and dependents on the national forests. The Forest Service actively encourages and sponsors the organization of local planning groups in the interest of good forest land use.

Brief General Statement Of Functions

The long-range objective of the Forest Service is to lead in solving the entire forest land problem of the United States. This includes improving and developing all constituent resources and services of the forests, land and soil, forest ranges, watersheds, wildlife, recreation, etc., to full productivity and to render full service. It includes correlating and integrating the management of these resources and services according to the principle of multiple use; making forest resources contribute to the fullest possible extent in solving related social and economic problems; and making forestry an integral part of agriculture, and an inseparable part of the Nation's entire social and economic structure.

The most urgent parts of the Forest Service's responsibilities and objectives are set forth in the following policy statements:

1. To attack the private forest land problem, the largest and most acute problem of American forestry today.
2. To make the national forests an outstanding example of effective administration in the broadest public interest.
3. To orient the approach to the entire forest problem from the standpoint of human needs (as well as from that of resource management).
4. To integrate more fully forest management with other phases of agriculture, and place it in its proper sphere in the entire social and economic structure of the Nation.
5. To complete scientific forest research well in advance of administrative needs.
6. To maintain at all times the democratic process in Forest Service organization. To consult the public and to obtain advice, criticism, and suggestions on needs, policies, programs, etc., and in turn to encourage an informed, intelligent, but critical and exacting public opinion.
7. To translate all other major objectives into concrete accomplishment.

It is the policy of the Forest Service to direct its local officers to cooperate with local planning bodies, both to seek and to give counsel.

Under this general policy the Forest Service directs a fairly comprehensive program for the improvement and good management of the 630,000,000 acres of the Nation which are in forest land, exclusive of the territories and possessions. Programs of the Forest Service include:

1. *Public ownership* and acquisition as an instrument to insure adequate social and economic services from forests by the creation of forest reservations from the public domain, and the purchase of forest lands. National forests now include a gross area of 229,000,000 acres of which over 177,000,000 acres are publicly owned.

2. *Public cooperation* with private forest land owners. The Forest Service administers a program of cooperative fire protection with the states and private owners which covers over 300,000,000 acres of forest lands. There is similar cooperation in the production and distribution of tree planting stock to farmers and in forestry extension and education. There is also cooperation with private timberland owners and operators in the promotion of better forest practices and sustained yield management.

In addition to this major effort the Forest Service cooperates with the Agricultural Adjustment Administration in connection with the range conservation program and in 1937 examined some 50,000,000 acres of western range.

The Forest Service also administers the Naval Stores conservation program for the Agricultural Adjustment Administration. It aims to conserve the forest resources and provide better yields of naval stores products over an area of some 65,000,000 acres.

The Forest Service cooperates with regional, state and county planning boards and is a participant in agricultural planning in cooperation with other agencies of the Department, state agencies and local farmer planning groups. It has cooperated with the Pacific Northwest Regional Planning Commission in studying and reporting on the region's forest resources. Forest officers have contributed of their time to studies of local forest problems in cooperation with local planning boards.

The Forest Service administers the Prairie States Forestry Project which has proved itself effective in conserving soil moisture and increasing the yields of cultivated crops and preventing the destruction of topsoil by wind. 165,000,000 trees have already been planted by this project, affecting over 23,000 farms in the plains region.

The Forest Service directs the New England Forest Emergency Project, an activity resulting from the September 1938 hurricane which struck New England, leveling 4 billion board feet of timber, of which 1,300,000,000 board feet were salvageable. The project includes a federal aid program for timber salvage

and an intensive program of fire hazard reduction directed by the Forest Service in cooperation with the states and local communities.

3. *Research.*—Research, as conducted by the Forest Service, is primarily concerned with forests: forest management, forest economics, forest influences in watershed management, forest range research, and uses and markets for forest products. Findings and results are available to individuals, industries and public and private agencies alike.

As a part of forest economics research the Forest Service conducts the nation-wide forest survey which since 1930 has covered more than one-half of the total forest area in the United States. The inventory is made by actual field survey and data are assembled on timber volume, growth, drain, and wood requirements. Reports and maps are available for individual regions covered by the survey.

The Forest Service, in cooperation with the Soil Conservation Service and the Bureau of Agricultural Economics, is making detailed surveys to determine the type of treatment that should be applied to specific watersheds in the interests of flood control. Detailed maps and reports on flood source areas are being prepared.

The above statement summarizes briefly the present programs of the Forest Service which are primarily concerned with the National Forests and involve reference to and consultation with local citizen groups whether organized into local planning agencies or not. Such local groups include, for example, committees organized in 500 to 600 New England towns to help advise and aid the Forest Service in its administration of the fire hazard reduction and timber salvage program necessitated by the New England hurricane.

Activities Affecting and Assistance to Local Planning

In directing its various programs to conserve and improve the use of the Nation's forest lands the Forest Service is concerned with local planning in three ways:

1. To obtain guidance and advice from local planning agencies in the formulation of policies and programs, as for example, helping to organize cooperative fire protection in a forest area receiving no protection, aiding in the extension of the national forest system to an area believed to warrant public acquisition and control, or in securing better forest practices on privately owned timber land. Such guidance is sought by local officials of the Forest Service and forest officers of the various cooperating states and is channeled up through the organization in the form of recommendations for action.

2. To obtain from local planning agencies actual participation in guiding the administration of Forest Service programs, as for example, planning the use of national forest range as cited in the introductory paragraph.

3. For services provided by local planning agencies all forest officers are available in turn for their assistance and advice on forest land problems. This includes an organization of about 790 rangers and 147 forest supervisors in as many counties and communities where there are national forests or other Forest Service activities. It also includes Forest Service officers in 10 regional offices, 18 forest experiment stations, and the Washington office.

Reciprocal counsel between the Forest Service and local planning groups has long been an accepted policy of the Forest Service, until recently informal and unorganized. Now, however, local, state, and national planning for agriculture has been crystallized into a uniform, well-organized process for the entire nation under the leadership of the Department of Agriculture in cooperation with the State Extension Services and local farmer planning committees. The Forest Service is participating in this activity locally wherever there is Forest Service personnel available and is rapidly bringing its informal relationships with local citizen groups into this more systematic and comprehensive program in these areas.

Specifically, the nature and extent of the various Forest Service programs and their relation to local planning follows:

1. *Public ownership and program of public acquisition of forest lands.*

A. *The National Forest Program.*—In this program the national forests find their place in 40 of the states, Alaska, and Puerto Rico. Thousands of people live within the boundaries of the 229,000,000 gross acres of the national forests and it is estimated that 1,000,000 people are directly dependent on the national forests for all or a portion of their livelihood. These dependents and other interested citizen groups comprise, in effect, an organization of local planning agencies concerned with national forest administration.

- (1) *Fire Protection.*—Local planning agencies are concerned with this work and in educating the general public to the need for protecting forests from fire.

- (2) *Forest Highways, the Transportation System.*—Forest highways are primarily for public travel and comprise essential parts of the national and state highway systems. Other forest roads and trails supplement local systems, permitting transportation to railroads and main highways and to communities. They are of vital concern to local residents and other users of the national forests. The interests of local people and local

planning agencies are considered thoroughly by the Forest Service in developing a national forest transportation system.

(3) *Water*.—To secure favorable conditions of water-flow is a major purpose of the national forests. Almost every major stream west of the Great Plains heads in some national forest. The protection of these watersheds is imperative if clear and regular supplies of water are to be provided and communities protected from floods. Some 400 cities and towns get their domestic water from the national forests. 90 percent of water for irrigation in the 11 western states has its source in the national forests. 11,000,000 potential horsepower originate in national forests' waters. National forests are integrally related to flood control and the protection of the navigability of streams.

(4) *Timber*.—The use of national forest timber resources is of vital concern in sustaining the economic life of local dependent populations and to the nation as a whole because of the necessity for maintaining an adequate timber supply. National forest timber sales (in 1937) totaled over 22,000 and as an indication of their relation to many local communities, 20,000 of these sales amounted to \$500 or less.

(5) *Forage*.—This major national forest resource supports wildlife and domestic livestock. During calendar year 1938 it is estimated that 87,000,000 acres of national forest land were used for pasturing livestock, and over 43,000 grazing permits were issued. The Forest Service sponsors the activities of 746 cooperative grazing associations.

(6) *Wildlife*.—The management of the national forest wildlife resources is the concern of everyone but principally sportsmen and local people. Nearly 75 percent of the big game of the western states depends on national forest forage in summer. While the game is controlled by the state, management of the habitat is the important method of regulation and control. Planning the management of national forest game in cooperation with the state, the Biological Survey, sportsmen's associations and local citizen groups is an accepted Forest Service practice and policy.

(7) *Recreation*.—Planning for the full development and use of the recreational and inspirational values inherent in the national forests is an important part of the Forest Service program. This is of vital concern to hundreds of local communities and to millions of people who use the national forests for recreation every year. The Forest Service is constructing organization camps in the National Forests where groups can care for themselves at minimum cost, such camps to be made available to groups sponsored by welfare organizations and other agencies.

(8) *National Forest Employment*.—National forests are huge work reservoirs. Between March 1938 and

February 1939 total employment on the national forests and in their administration approximated 84,941 man years. The greatest amount of employment was provided by the U. S. C. with 401 camps working in the national forests. In addition, the Forest Service supervises the work of 129 camps in private forest lands, 216 on State-owned forest lands, and 21 camps for the Tennessee Valley Authority. Long-time public works programs have already been developed by the Forest Service. This is significant because many of the national forests are located in regions of acute unemployment and where the general income level is low.

(9) *New National Forests*.—Studies made by the Forest Service show that in addition to the present net national forest area of 177,000,000 acres approximately 100,000,000 acres should be ultimately added to the national forest system in areas characterized by high watershed values, soil erosion, timber depletion, etc. 35,500,000 acres of this acquisition would be in the existing gross boundaries of national forests and established purchase units now having a total gross area of 229,000,000 acres. Certain local planning problems are related to the acquisition of land for national forest purposes.

The Forest Service believes that an area of about 15,000,000 acres of forested public domain should be added to the national forest system to round out existing national forest boundaries into logical management units.

The Forest Service has and is developing national forest plans, programs, techniques, and research and survey background for the nine forest problems outlined above, to the extent which personnel and available funds permit. A community concerned with the possibilities of transferring land into the national forest for its best use and for a better balance of land use throughout the community as a whole, can avail itself of the research, survey, and planning experience of the Service and of active administrative, management, personnel, and financial aid insofar as available funds permit.

For those communities not concerned with land transfer to national forest status the local planning assistance available from the Forest Service is limited to administrative, management, and technical advice and consultation with those forest officials located within reasonable distance, except as funds under certain acts of Congress such as the Clarke-McNary law of 1924 and the Farm Forestry Act of 1937, provide for special aid. A number of Forest Service planning programs, forestry techniques, and forest surveys are of value to independent local planning as similar exemplary material, and can be procured with prop-

authority. Visual educational facilities are available within limits.

B. Other Public Forest Acquisition Programs.—

(1) *State Forests.*—The Fulmer Act of 1935 authorizes Federal aid to the States to help complete the State forest system, providing for reimbursement by the States from funds received from the sale of forest products. Thirty-three States have qualified for acquisition under the Fulmer Act but no appropriations have been made by Congress to carry out provisions of the act.

(2) *Community Forests.*—Community forests affect such problems as the need for protection of community water supplies, the need for outdoor recreation, improved hunting and fishing, timber for municipal and other uses and a source of work for local unemployed. This is a phase of public forestry definitely a community venture. The Forest Service and State forestry agencies are available to local groups for consultation and advice in establishing community forests. There are now over 1,700 community forests in some stage of development or management in 34 or more States, with a total of more than 3,600,000 acres. Community forests have shown a profit to many communities.

2. *Public Cooperation.*—Programs directed by the Forest Service in this field have already been briefly described. This is a field in which much dependence is placed on local people and on local planning agencies to solve their own forest problems through the media of the national forest. In extending aid to private owners cooperation by the Federal Government recognizes individual responsibilities and interests as well as those of the general public.

(1) *Forest Protection.*—First responsibility of public and private agencies alike is to protect forests from damage by insects, disease, and fire. Since these problems have no respect for property lines and sometimes reach enormous proportions public aid has been necessary. Organized fire protection has been extended to 301,911,350 acres of forest land. There are still 182,762,920 acres needing organized protection, in which 94 percent of the total forest area burned occurred in 1937. The Forest Service and State forestry agencies will cooperate with local planning agencies in all forest regions in educating the public to the need for forest protection.

Federal cooperation with the States is authorized in the production of trees for planting by farmers and in provisions for farm forestry extension. The Federal function in this regard has been carried on by the Forest Service. The 1939 agricultural conservation program of the Agricultural Adjustment Administration provides payments for farm woodland practices as a part of the soil building goal for each farm. Shel-

terbelt plantings in the Prairie Plains States is another Forest Service cooperative venture. The Farm Forestry Act of 1937 which provides technical assistance and trees to farmers is administered by the Forest Service and the Soil Conservation Service, guided by farm forestry committees organized in each State—the Forest Service in forest farm regions, where forestry is a major source of livelihood such as the South, Northeast and Northern Lake States—and the Soil Conservation Service primarily in the Central States where farm woodlands are but a small part of the farm economy. Survey information from the western range conservation program of the Agricultural Adjustment Administration in which the Forest Service cooperates is available to local planning agencies. The Forest Service encourages the cooperation of local planning agencies in the formulation of policies and in the administration of the Naval Stores conservation program.

To fully meet the forest problem the Forest Service believes certain additional new measures will be necessary. Of concern to local planning agencies are the following measures, recommended by the Forest Service, that should be included in a forestry program mainly through the cooperative approach:

(a) Public aid for forest utilization education and forest products marketing; extension education in farm forestry and industrial forestry.

(b) Public credits to industries that will agree to forest conservation practices.

(c) Equitable timber land taxation that will encourage forest land owners to conserve and not to liquidate private forests.

(d) Pooling public and private timber where private owners will agree to proper forest practices in order to permanently sustain forest communities.

(e) One means of meeting the private forest land problem proposed by the Forest Service is through the so-called forest restoration plan which the Forest Service believes is particularly adapted to depleted forest regions where the land is potentially productive and where there is a serious problem of unemployment and low income. The plan proposes the leasing of forest land from farmers and others for a rental not exceeding the average of the taxes for the last 5 years. The leased forest lands are to be managed according to proper forestry practices, the lease fee to assist the owner to pay current taxes during the period of the lease. Work would be done by the resident operator or owner under voluntary contractual agreement with the Government which would specify the kind of work to be done and the cost. The Government would pay all expenses of doing the work, diverting present relief funds for this purpose. As income is received from the land or from products sold, the Government would be repaid the amount provided in the contract.

(f) An additional measure, public regulation or restriction of private forest exploitation, is now believed desirable where public interests are involved and where private owners are unwilling to cooperate and public ownership is believed to be too slow and costly. Public regulation is needed to help protect the private owners who are now practicing forestry but are subject to unfair competition from others who are mining and exploiting the forests regardless of the values at stake.

These are all measures now being considered by the Forest Service of concern to local planning agencies in the forest regions.

3. *Research.*—Scientific information is essential to the successful management of forests and their resources. Findings and results of the Forest Service in its research are available to all individuals, industries, and public and private agencies. The Forest Service conducts research in five major fields:

(a) Forest management research seeks how to protect forests from fire, insects, and disease. It determines the best methods for managing forests and for regenerating them naturally and artificially. It includes the study and determination of improved methods of fire detection and control; methods and means of growing, managing and harvesting forest crops including farm woodlots, pulpwood, and naval stores.

(b) Forest economic research determines economic aspects of managing farm forests, public forests, and those in industrial and other ownerships. Under this phase of research an important project is the Nationwide forest survey which is obtaining authentic and up-to-date information on the nature and extent of the Nation's forest resources. Forest economic research includes the study of forest taxation, tax delinquency of forest lands, land and resource utilization to help stabilize dependent industries and communities on the basis of permanent land and resource management, analyses of economic aspects of the timber growing and harvesting methods, organizing farm woodland cooperatives, stability of ownership of forest lands, financing forest industries, price and methods of marketing forest products, and production statistics.

(c) Forest-products research is carried on mainly at the forest products laboratory at Madison, Wis., and is concerned with reducing wastes and lowering the cost of harvesting, converting and utilizing the timber crop, insuring to the consumer better service from wood in natural and converted forms, and developing new wood uses.

(d) Forest-influences research is concerned with plant cover in relation to water flow and erosion, including intensive studies of the absorptive capacities of forest soils and the effects of misuse of land on run-off.

(e) Forest-range research is concerned with the use of grass and browse which occurs in combination with timber. Research includes determination how or when range lands can be grazed without injury to plant cover and soil. It determines forage values, grazing capacities, and range forage utilization standards. Such research aids in the restoration and rebuilding of depleted range and abandoned farmlands.

Research activities of the Forest Service outlined above are directed through 18 forest experiment stations and the forest products laboratory. They extend to 78 experimental forests where they serve as outdoor laboratories and demonstration areas. Many results of research may be seen on the various demonstration areas. Research results may also be obtained from the Forest Service in the form of publications.

Local Planning Data and Information Available¹

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¹ Publications available unless otherwise noted. Price indicates that free supply is exhausted. O. F. means out of print.

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RURAL ELECTRIFICATION ADMINISTRATION

Executive Order No. 7037 of May 11, 1935.
Rural Electrification Act of May 20, 1936.

Brief General Statement of Agency Functions

Rural Electrification Administration is primarily an action and not a research agency. Such studies as it makes are for guidance in respect to policies governing action or the desirability and method of some proposed specific action.

The function of Rural Electrification Administration is to serve as an agency to promote electrification of rural areas not served through private companies, by

Reorganization Act of April 3, 1939.
Reorganization Plan No. II of May 9, 1939.

lending public funds at low rates of interest on a self-liquidating basis to existing local enterprises or to new enterprises organized under State laws for the distribution of electric energy within a fairly compact definite area, usually not larger than a county. The dominant type of borrower is a nonprofit membership corporation or cooperative, organized for the specific purpose of constructing and operating a rural electric system. The major part of the loans made to these borrowers is for the construction of lines, although relatively small sup-

plementary loans are frequently made for working capital and for wiring of buildings, and in exceptional cases for generating plants. In most instances a borrower purchases wholesale energy of a private company serving adjacent territory, or of a nearby municipal plant, or of a public agency such as T. V. A., and engages in retail distribution.

The general policy of Rural Electrification Administration, determined primarily by details of the Rural Electrification Act of 1936, is as follows: (1) To lend Federal funds at the rate of interest at which they are procured by the Government to existing private companies, municipalities, and other nonprofit organizations that submit self-liquidating plans for the distribution of electricity in their respective areas; (2) to lend primarily for the construction of lines, but on occasion and incidentally for generating plants, wiring of farm premises, and working capital; (3) to lend one-half the available loan funds of each year among the several States in the proportion that the unelectrified farms in any State bear to the total unelectrified farms in all the States; (4) to lend the other half of the available loan fund of any year at the discretion of the Administrator of Rural Electrification Administration, but not more than 10 percent of this half in any one State in any one year; (5) to avoid duplication of existing services by private companies or other agencies; (6) to exclude from the proposed systems of borrowers as nonrural all cities and villages of 1,500 or more inhabitants; (7) to favor proposed systems designed to give areal rather than selective coverage; (8) to advise and aid borrowers being organized for the purpose of securing loans in effecting organizations functionally and legally adequate for the purpose, in designing their systems, in constructing them, in making contracts for wholesale energy, and in developing effective and economical operating procedures; and in general by making expert consultants available to guide borrowers successfully in meeting technical and business problems during the period when they are progressing toward a stable and self-amortizing basis.

The nearest approach to a definite plan and program is that of the Congress manifest in the enabling act. This plan specified a 10-year program of loans by Rural Electrification Administration for promotion of rural electrification, at the rate of approximately \$40,000,000 per year. In fiscal 1939 an additional \$100,000,000 was made available for that year by the relief act. In fiscal 1941, a total of \$100,000,000 was authorized for rural electrification loans. Further definite elements of this plan of the Congress are the conditions determining the distribution of loans throughout the several States, noted under the paragraph on policy above.

Within the frame of this plan and program of the Congress Rural Electrification Administration must

proceed essentially without a definite master plan and program, for it must await applications for loans from private companies, municipalities, or local membership corporations which are organized for the purpose. Rural Electrification Administration is not empowered to make a plan and program which specifies that particular rural sections of particular States are the areas to be electrified during some ensuing period. It must wait on the spontaneity of applications for loans. However, within the aggregate of spontaneous applications it can make selections and allocations in accordance with the principles specified in the enabling act, of probable ability to repay, and of calculated relative social benefit.

Notwithstanding dependence primarily on unplanned and spontaneous applications for loans from local borrowing organizations, in three respects this generalization should be modified.

1. In a rural community in which a county planning committee is not yet completely functioning, when a movement develops among the farmers to organize a borrowing agency to bring electricity to the community, the County Agent is usually consulted. Usually he becomes the agent who calls the necessary community mass meetings. His knowledge of the local rural conditions and of trends and probable developments puts him in a position to advise the borrowing organization concerning its plan and to aid the examining agents of Rural Electrification Administration in evaluating the feasibility of the plan. In other words he is in a position to aid in converting an initial vague plan into a more definite plan.

2. As will be explained more fully below, the Department of Agriculture and the land-grant colleges through the Extension Service are setting up land-use planning committees, consisting largely of resident farmers, in each agricultural county of the United States. Already the influence of these county committees on rural electrification is manifest, not only in promoting electrification through Rural Electrification Administration, but also in stimulating extensions by private companies. In Scott County, Va., for instance, the county planning committee included in its plan electrification through Rural Electrification Administration, with the result that the private company, theretofore unwilling to extend its lines throughout the county, was stimulated to develop and execute a program of extensions that on the whole is reasonable as to areal coverage and rates. This is an exceptional case, but it indicates that the stimulation either of the organization of a cooperative to procure a Rural Electrification Administration loan or of positive reasonable action on the part of some private enterprise in a position to serve the farmers of the county is possible.

3. Most borrowers make applications for more than one loan, because they soon realize that the first section of their distributing system can be strengthened by successive extensions that round it out and stabilize it. In such instances, after the first loan is made and the nucleus system is built, Rural Electrification Administration is in a position to apply its larger experience in helping the borrower to plan, program and design additional sections, and in such cases it takes into consideration the land-use plans of local planning committees where they exist.

Activities Affecting and Assistance to Local Planning

The incorporation of Rural Electrification Administration into the Department of Agriculture has brought to the aid of the former all the resources of the Department; not only those available in the offices in Washington, but also those available in the representatives of the several bureaus of the Department throughout the States. Notable among the agencies of the Department throughout the States are the county land-use planning committees.

The Department is organizing State land-use planning committees in forty-seven States, and two regional land-use planning committees—The Northern Great Plains Land-use Planning Committee and the Southern Great Plains Land-use Planning Committee. Heading up in the State committees will be local land-use planning committees in the 3,000 counties of the United States. Subcommittees of township or other lesser areas will head up in these county committees. Consequently there will be generally available in each county from which Rural Electrification Administration may receive application for a loan, a land-use planning committee to aid in evaluation of the feasibility of the project, and if it is feasible, in the organization of the borrowing enterprise.

The first constructive work of these county committees will be to prepare a county plan for land use. This plan will be available to Rural Electrification Administration examiners and will be of positive value in evaluation of the lay-out of the electric distribution system proposed by a prospective borrower in the county. A county planning committee is in a position to include rural electrification in its plan, and it can stimulate the provision of adequate service either by a heretofore recalcitrant private company, as in the case of Scott County, Va., noted above, or by the organization of a county cooperative, especially for the purpose of securing a loan from Rural Electrification Administration for the construction of a distribution system. In the aggregate these county planning committees can influence and channel rationally the "spontaneity" of

the emergence of borrowers on which Rural Electrification Administration is at present dependant, and can aid Rural Electrification Administration in evaluating a proposed system in terms of its suitability to the economy of the county.

In turn, although Rural Electrification Administration is not empowered to predetermine a schedule of the distribution of loans throughout the United States, other than is specified in the Enabling Act, it can on request advise any county planning committee concerning the availability of loan funds for the State concerned, and concerning the technical and feasibility characteristics of any proposed distribution system within the county.

By June 30, 1940, Rural Electrification Administration had allocated funds in the amount of \$269,748,614 to 691 local distributing organizations for the construction of 253,189 miles of line in 45 States—an average of approximately \$380,000 and 365 miles of line per borrower. In the Annual Report of Rural Electrification Administration to the Congress in January, 1940, pp. 158-343, will be found State maps indicating the distribution of borrowers' local rural distribution systems, State by State as of June 30, 1939.

Local Planning Data and Information Available

Data in the files of Rural Electrification Administration cannot be of especial value to local planning committees, because Rural Electrification Administration is an action and not a research agency; its studies are related to policies, procedures, and evaluation of specific projects; its data of a general nature are derived chiefly from other Federal and State agencies and are equally available in original form to county planning committees; and its data concerning the local conditions surrounding a particular project are not likely to be as intensive and complete as those procured by the planning committee itself.

On the other hand, the data procured by a county planning committee, if made available to Rural Electrification Administration, are of very great value to the latter in its evaluation of the technical and economic feasibility of a borrower's proposed system. Increasingly Rural Electrification Administration will depend on local planning committees for local data bearing on the economy and feasibility of proposed systems.

R. E. A. Electric Service. For general distribution to farmers who are not familiar with R. E. A.'s program and purposes. A brief explanation of R. E. A. loans, how they are made and to whom. Charts are included to show the status of rural electrification both in America and abroad. 4 pages.

Rural Electrification on the March. The complete story of R. E. A. to January 1, 1938. A broad summary of R. E. A.

activities, functions, and development. An informative aid for farm leaders, project officials, and employees. 73 pages. 1938 Annual Report. The most complete account of R. E. A. activities during the fiscal year 1938. Describes obstacles overcome, progress made, and administrative methods. Includes statements and statistical appendices on rural electrification in the various states. 261 pages. (For sale by the Superintendent of Documents, Government Printing Office, Washington, D. C., for 50 cents a copy.)

A Guide for Members of R. E. A. Cooperatives. Information on cooperatives, what they are and how they work, with special application to rural electric co-ops. Also includes general information on uses of electricity, electrical terms, appliance consumption, rate schedules, and "do's" and "don't's" in handling electricity. 40 pages. Available after May 1, 1939.

The Electrified Farm of Tomorrow. A short summary of rural electrification progress in the United States, what electricity can do for the farm and home of today and tomorrow, how rural people get electricity through the Rural Electrification Administration, and rural electrification prospects for the future. Available after May 15, 1939.

Rural Electrification News. A monthly magazine issued by R. E. A. A summary of rural electrification activities both private and public throughout the country. It contains feature articles, pictures, technical discussions, news items, and seasonal articles on the use of electric farm equipment. 31 pages. (Subscriptions at 75 cents a year received by the Superintendent of Documents, Government Printing Office, Washington, D. C. Single copies, 10 cents each.)

General Contract for Rural Electrical Distribution System

Construction Contract Form. Construction contract form prepared for bidders on rural electrical distribution systems financed by R. E. A. Contains notice to bidders, instruction to bidders, contractor's proposal, construction contract, bidder's qualifications, contractor's bond, material and construction specifications, construction drawings and plans, description of assembly units. Not for free distribution. (For sale by the Superintendent of Documents, Government Printing Office, Washington, D. C., at \$1 a copy.)

Joint R. E. A. Publications

Little Waters. A study of headwater streams and other little waters, their use and relation to the lands, by Harlow S. Person and others for the Soil Conservation Service, Resettlement Administration, and Rural Electrification Administration. 82 pages. (For sale by the Superintendent of Documents, Government Printing Office, Washington, D. C., at 30 cents a copy (paper-bound) and 50 cents a copy (board-bound).)

Electric Power on the Farm. The story of electricity, its usefulness on farms, and the movement to electrify rural America. Contains information on electricity in relation to agriculture, including chapters on rural electrification abroad, energy rates, and cooperative electric distribution. Edited by David Cushman Coyle. 170 pages. (For sale by the Superintendent of Documents, Government Printing Office, Washington, D. C., at 25 cents a copy.)

SOIL CONSERVATION SERVICE

Soil Conservation Act of 1935.

Title III of the Bankhead-Jones Farm Tenancy Act of 1937.

General Introductory Statement

The Soil Conservation Service is an action agency, as distinct from bureaus engaged solely in research. It administers all activities of the Department of Agriculture involving physical adjustments in the use of agricultural land. These activities make up a unified program of land-use action, having as objective the conservation of soil resources, the advancement of agriculture, and the betterment of people living on the land.

The use of agricultural land has implications extending beyond the rural or farming area. It affects most of the matters with which local planning is concerned. To illustrate briefly, highway planning must take into account the productivity of areas to be served; planning for schools and other social facilities must consider the capacity of the land to support a population and to pay taxes under uses to which it is adapted; and planning for industrial development must take into consideration the ability of the land to produce raw materials and support potential consumers. Planning for the wise

Flood Control Act of 1936 and supplemental legislation. Water Facilities Act of 1937.

Cooperative Farm Forestry Act of 1937.

use of land resources is basic to planning in almost every other sphere.

The soil conservation district has grown out of the need for a mechanism through which local initiative could be marshalled to share responsibility with the Federal Government.

Brief General Statement of Functions

In correcting maladjustments in the use of agricultural land the Service has two major functions from the standpoint of its effect upon local planning. First, it participates actively in local land-use planning as a means of providing guidance for its action program. Second, it assists local planning of all types through contributions of information and basic data. Departmental policy requires the enactment of suitable legislation as a condition precedent to further soil conservation work by the Department in any State. This requirement has now been extended to flood control and is expected gradually to embrace other departmental

physical land-adjustment programs. Demonstration work of the Service and the States, involving cooperation with individual farmers in selected watersheds, has indicated the necessity of a policy of moving out as rapidly and as effectively as possible to all land vulnerable to soil erosion and related evils. It is also the Service policy that local responsibility should be obligated to assume its proportionate share of the work of guiding and carrying out land-use action programs. The development of an adequate program and work plan by the district is therefore prerequisite to Service assistance. Both are subject to approval by the Service as a condition precedent to cooperation.

The Service participates directly in the local planning process principally through the county agricultural planning program developed jointly by the Bureau of Agricultural Economics and the land-grant colleges, and through its policy of cooperation with soil conservation districts. Substantially the county agricultural planning program involves the creation of county committees composed of farmer representatives for the purpose of planning local agricultural and land-use programs. After approval at State, regional and national levels, the county plans are carried out insofar as possible by action agencies of the Department and the States. At each level the Service, as one action agency of the Department, participates immediately in the planning process. Its technicians assist the county committee in an advisory way and provide basic data relating to soil conservation and allied matters.

A generally similar program relationship exists between the Service and the soil conservation districts now being organized locally under State law. It is the procedure of the Soil Conservation Service to work insofar as possible through these districts empowered by statute to carry out action programs of land-use adjustment. They are independent political subdivisions of the State and completely without organic relationship to the Service or other Federal agencies. In general, they exercise two types of authority, the first involving the power to encourage and promote good land-use practice by direct assistance to individual land users in the form of technical services, equipment, labor, planting stock, and similar aids: the second involving the power to establish land-use ordinances by referendum and to enforce them in the State courts. A district is administered ordinarily by five supervisors, of whom two are appointed by the State Soil Conservation Committee and three elected by the residents of the district. Normally districts are set up to include watersheds or some other naturally bounded area because land-use problems are not confined by artificial boundaries.

While essentially a mechanism for local land-use action the soil conservation district is also an important

land-use planning agency. Programs of land-use readjustment and detailed plans for putting them into effect are formulated by the district supervisor in collaboration with technical specialists of Federal and State agencies. The soil conservation district as a State agency, is not limited to cooperation with the Soil Conservation Service. It is empowered to enlist the cooperation of any available agency, State, Federal or private. A number of Department of Agriculture agencies other than the Soil Conservation Service are already cooperating with soil conservation districts and it is anticipated that a large part of the Department's broad land-use program will eventually be projected through these local agencies.

The Standard Soil Conservation Districts Act upon which most of the present State legislation authorizing districts is based was prepared by the Department in collaboration with representatives of the various State agricultural agencies.

Activities Affecting and Assistance to Local Planning

Activities of the Soil Conservation Service may be divided roughly into three categories: Action, Research, and Surveys. Action involves the actual adjustment of land-use patterns and practices in cooperation with land operators themselves. Research involves studies of the nature, cause, and solution of land-use problems to provide essential knowledge as basis for appropriate action. Survey work provides a physical inventory of present land conditions as basis for corrective operations. Action activities are carried on insofar as possible in accordance with the plans developed by county land-use planning committees and are projected through local soil conservation districts.

In its relationship with districts, the Service engages directly and actively with an important local land-use planning process. Its field staff participates, in an advisory way with the district supervisors in developing suitable programs and work plans and in providing essential data on which plans are based. Once approved, the plans are carried out largely through assistance provided to the district supervisors under a formal memorandum of undertaking. Assistance involves the work of technical personnel in planning individual farms for conservation treatment, as well as equipment, planting stock, and services necessary to carry out the district's program and plan of work.

Action activities, carried out as nearly as possible in cooperation with districts, are—

1. Conservation of soil and water resources by applying sound land use to farm and grazing lands.

This work is concerned primarily with the control of soil erosion on agricultural lands and involves the application of a complete program of conservation treat-

ment, farm by farm. Technicians of the Service and of allied agencies, assist farmers in demonstration areas and soil conservation districts to plan necessary treatment work. Material aid and assistance in carrying out the work is furnished by the Service to the soil conservation district or in demonstration areas to the farmer.

These activities directly affect local planning as the proper use and conservation of soil resources is essential to the permanent productive use of approximately three-fourths of our agricultural land. Erosion control has a direct bearing on floods, siltation of streams and reservoirs, and wildlife depletion, all of which are of concern to local planning agencies, as well as a direct relationship to various economical and social conditions such as tenancy and migration.

2. Buying up lands unfit for economic cultivation and developing them for sustained constructive use.

This phase of activity is designed to correct economic and social maladjustments contributing to physical land misuse. Submarginal lands are taken out of cultivation and developed for use along constructive lines for which they are suited.

The submarginal land program is intimately connected with local planning activities in three major ways: (1) The planning of projects as part of the cooperative county planning work of the Department and the State extension services and land-grant colleges; (2) the influence of land purchases and relocation of families upon the functioning of local governments; (3) the inauguration of plans to manage the purchased lands which often involves the acceptance of responsibility by local organizations or groups of farmers. The occupation and use of submarginal lands exerts a varying and often strong influence upon local governmental activities because of direct fiscal relationship. Lands unsuited to their present use are usually heavily tax-delinquent and constitute a problem for local fiscal authorities. Scattered, low-income families in submarginal areas frequently involve unreasonably high per capita cost for public services such as roads and schools. Another example of the close connection between submarginal land projects and local governmental action is where rural zoning is practiced. The purchase of isolated submarginal farms in areas classed as unsuited for permanent agricultural settlement has been coordinated with the rural zoning program of the county making the ordinances effective and stimulating a recognition of the economic desirability of a zoning program.

Most of the lands purchased are being used for grazing, and have been acquired in part to make possible an increase in the size of farm units in areas where the land is generally unsuited to crop cultivation, and where the units are too small for operation as stock farms or ranches. Wherever possible, purchased lands are leased to a cooperative grazing association or other com-

parable body organized by local farmers. Lands leased from the Soil Conservation Service are frequently combined with lands leased by the grazing association from private owners. In conjunction with the officers of the association, the representatives of the Soil Conservation Service plan the allocation of the use of all the lands among individual operators who are members of the association. Local participation is therefore vital in both the planning and management of these land-purchase projects and makes it possible to extend the benefits of planning over an area from five to six times as large as the area actually purchased.

3. Assisting in the development of watershed plans for upland flood control.

The Service collaborates in this activity with the Bureau of Agricultural Economics and the Forest Service. It involves preliminary investigations, detailed flood-control surveys, and actual treatment of the land in accordance with a definite plan of operations.

Implications of flood control to local planning, urban as well as rural, are obvious.

4. Aiding farmers and ranchers in the seventeen Western States to plan and install small facilities for storage and use of water.

This activity is concerned directly with the best utilization of water for farm and ranch supply and as a means of prompting good land use. The Service helps farmers locate and install pumps, springs, dams, windmills, and similar water development facilities and assists in planning land use based on a maximum utilization of available water supplies.

This conservation and development of water resources is of vital concern to local planning agencies for sustained productive use of land resources in semi-arid and arid sections. It has relationship to flood control, drought alleviation, and similar problems.

5. Assisting farmers to plan, develop, and manage farm woodlands.

This activity is intended to promote the use of trees as a farm crop in establishing sound and conservative land-use practice. Farmers are supplied with planting stock and helped by technicians of the Service and State agencies in developing woodlands as an economic asset and conservation measure.

One immediate local planning implication is the establishment of protective land use of a permanent nature. Others extend to the development of farm timber crops to supply local pulp and paper industries.

Research activities of the Service include—

1. Investigations to determine the economic and social effect on farmers and on the public of systems of farming under definitely planned programs of soil and water conservation, compared with farming involving uncontrolled and progressive erosion and soil depletion. These studies furnish an economic basis upon which soil and water conservation practices may

be evaluated and upon which recommendations may be made for the most effective and economical application of these practices in the soil conservation program.

In determining the effect of different types of farm organization, farm practices, and farm operations on (1) farmers' incomes, (2) farmers' living standards, and (3) other problems of land use from the point of view of the individual farmer, community, State and Nation, research results are of interest to local planning agencies of all kinds.

2. Investigations to determine and evaluate climatic factors causing regional differences in erosion and the interrelation of these factors with plant association, topography, soil and rock materials as they affect soil and water conservation practices and land use. These studies have a readily apparent value for local planning.

3. *a.* Investigations of the effect of land-use run-off and erosion with special reference to floods. These studies are carried out on entirely experimental watersheds and involve the determination of rainfall run-off, ground water levels, soil loss, crop yields, and other factors.

b. Investigations of the run-off characteristics of principal agricultural regions of the United States, as a basis for design. These determine run-off from agricultural areas and watersheds as basis for design of soil and water conservation measures.

c. Investigations of the hydraulics of soil and water conservation. These are designed to increase the dependability and decrease the cost of hydraulic work used in soil and water conservation operations.

4. *a.* Investigations of the effects of soil characteristics on soil and water conservation.

b. Investigations of the effects of vegetal covers on soil and water conservation.

c. Investigations of the effects of mechanical measures of conserving soil and water.

5. Farm drainage investigations. Investigation and reports are made upon the laws, regulations, and methods affecting drainage with the view of developing cheaper methods of organizing, administering, and maintaining drainage enterprises.

6. Farm irrigation investigations. Investigation and reports are made upon the customs, regulations, laws, and methods affecting farm irrigation. Snow surveys for the purpose of forecasting irrigation water supplies are also made. This work is of importance to the irrigation farmer.

7. Hill-culture studies.

8. Sedimentation studies. These are fundamental in carrying out that part of the Soil Conservation Act which reads, "and thereby to preserve natural resources, control floods, prevent impairment of reser-

voirs, and maintain the navigability of rivers and harbors, protect public health."

The basic data developed by these research activities are available to all planning agencies either in published or unpublished form.

*Survey activities of the Service include—*1. Flood-control surveys, in cooperation with the Forest Service and the Bureau of Agricultural Economics, to develop a plan for the application of flood-control measures to a given watershed. Survey activities of this kind actually constitute local planning and are carried out in collaboration with appropriate local agencies. Insofar as possible, work called for by the flood-control plan thus developed is projected through soil-conservation districts or similar local agencies.

2. Conservation surveys, or inventories of the physical features of the land, are made to provide a basis for control of erosion and good land use. In this physical inventory the type of soil, the slope of the land, the kind and degree of erosion, and the present land use are determined on the ground by a surveyor and are shown on a suitable map, preferably an aerial photograph. With complete information on these four factors, the capability of the land for use can be evaluated readily. With the physical inventory as a basis and with full recognition of the farmer's economic and social situation, his present system of farming and his preferences regarding possible changes, the soil-conservation technician works out a plan that is effective and satisfactory. The object is not only to control erosion but to enable him to use his land to the best possible advantage.

Conservation surveys vary greatly in their scale and intensity according to the purpose they are to serve. *Detailed surveys*, used in planning individual farms, are made at a scale of 4 inches equals 1 mile or even larger, and show the conditions within each field. *Reconnaissance surveys*, are made rapidly on a much smaller scale, usually 1 inch to the mile. They show the general conditions over a large area such as a county, State, or large watershed and are useful in general planning but are not adequate for outlining detailed erosion-control practices on farms.

As in the case of research, the surveys of the Soil Conservation Service provide local planning agencies with essential data bearing on various problems with which planning seeks to deal.

The conservation surveys are perhaps the most complete land inventories ever made on an extensive scale. Farmers and other land users are readily able to locate their own farms on the published survey maps and may use them as a base for planning conservation or other operations. A complete set of survey sheets constitutes a highly detailed map for the area covered, and

should be extremely valuable to local planning groups.

Photogrammetric activities of the Service involving the production of base maps from aerial photographs also provide local planning agencies with valuable working materials.

As of June 1, 1940, legislation authorizing the formation of soil-conservation districts has been enacted by 38 States, and 800 districts involving 179,914,170 acres have been organized. The Soil Conservation Service has entered into formal cooperative working arrangements with 203 of these districts, embracing approximately 116,000,000 acres.

There are 170 projects and 393 C. C. C. camps engaged in demonstrating soil-conservation work on private land under technical direction of the Service. Some 39,492,918 acres of land are involved. In some areas these demonstrations are located in soil-conservation districts. In addition, there were four large watershed projects involving extensive work on some 56,944,873 acres of land largely in public ownership. The President's Reorganization Order No. 4 provides that all erosion-control work on public lands under the administration of the Department of the Interior be conducted by that Department. There are 39 areas in which C. C. C. camps are working principally with local drainage agencies in clearing and rehabilitating existing drainage facilities on public farm land. Thirty-six nurseries for the production of erosion control planting stock are operated by the Service.

In cooperation with the State Extension Services more than 2,200 individual farms outside regular demonstration areas have been planned as one-farm demonstrations of conservation.

Approximately 188 areas in the 17 Western States have been approved under the water-facilities program. About one-third of these areas are approved for planning only; the others are approved for planning and operations.

Conservation surveys on a reconnaissance basis, now complete or currently under way, cover approximately 337,000 square miles; on a detailed basis, either complete or under way, approximately 138,750 square miles.

Flood-control surveys in cooperation with Forest Service and Bureau of Agricultural Economics are in progress on 20 major watersheds embracing an aggregate of 197,600 square miles. Preliminary flood control examinations are complete or in progress on a total of almost 1½ million square miles.

Local Planning Data and Information Available

As of June 1, 1940, approximately 11,400,000 acres of submarginal lands had been acquired or were in process of acquisition. Of this total, about 7,150,000 acres are being administered by the Soil Conservation Service

under the authorization of title III of the Bankhead-Jones Farm Tenant Act. Approximately 850,000 acres have been placed under the administration of State agencies and some 3,400,000 acres have been transferred for administration by other Federal agencies.

1. Planning Bibliographies

Bibliography on Soil Erosion and Soil and Water Conservation. U. S. D. A. Miscellaneous Publication No. 312. 661 pp. October 1938.

Land Use and Soil Conservation. A list of informational material available to the public. 8 page folder.

List of Publications and Conservation Charts of the Soil Conservation Service. 13 pp. mm. Revised January 1940. (Revised currently.)

Publications on Planning for Soil, Water, and Wildlife Conservation, Flood Control, and Land Utilization. SCS-MP-21. 119 pp. August 1939.

Selected Annotated Bibliography on Sedimentation as Related to Soil Conservation and Flood Control. SCS-MP-20. 40 pp. mm. June 1939.

Soil Conservation Literature: Selected Current References. Issued periodically by the library staff. 1937 to date.

Wind Erosion and Sand Dune Control: A Selected List of References. An annotated bibliography. 63 pp. mm. June 1940.

2. Planning Information, Data, Maps, Plans, Research Material, etc.

Legal.—Basic Provisions of the Standard State Soil Conservation Districts Law. 11 pp. mm.

A Standard State Soil Conservation Districts Law. 64 pp. 1936. 10¢.

General.—Conservation Farming Practices and Flood Control. U. S. D. A. Miscellaneous Publication No. 253. 16 pp. October 1933.

Headwaters: Control and Use. Report of Proceedings of the Upstream Engineering Conference held in Washington, D. C. on September 22 and 23, 1933. Soil Conservation Service and Forest Service with the cooperation of Rural Electrification Administration. 261 pp. April 1937. \$1.00.

Little Waters: Their Use and Relations to the Land. Soil Conservation Service, Resettlement Administration (now Farm Security Administration), and Rural Electrification Administration. 82 pp. April 1933. 30¢, paper cover.

Native Woody Plants of the United States: Their Erosion-Control and Wildlife Values. U. S. D. A. Miscellaneous Publication No. 303. 362 pp. June 1938; slightly revised May 1939. \$1.50, paper cover, \$1.75, buckram bound.

Rainfall Characteristics as Related to Soil Erosion. U. S. D. A. Technical Bulletin No. 693. 44 pp. December 1939.

Siting of Reservoirs. U. S. D. A. Technical Bulletin No. 524. 168 pp., with map. July 1936; revised August 1939. \$1.

Soil Conservation. Official Monthly Periodical. August 1933 to date. 10¢ a copy, \$1 yearly.

Soil Conservation Districts for Erosion Control. U. S. D. A. Miscellaneous Publication No. 293. 19 pp. October 1937.

Ten Billion Little Dams. 20 pp. 1936.

To Hold This Soil. U. S. D. A. Miscellaneous Publication No. 321. 123 pp. August 1938.

What Is Soil Erosion. U. S. D. A. Miscellaneous Publication No. 286. 85 pp. February 1938.

Wildlife Conservation Program of the Soil Conservation Service. SCS-AR-3. 37 pp. mm. June 1938.

Soil Conservation Plans and Practices

- Cover Crops for Soil Conservation. U. S. D. A. Farmers' Bulletin No. 1788. 14 pp. July 1936.
- Erosion on Roads and Adjacent Lands. U. S. D. A. Leaflet No. 164. 8 pp. September 1938.
- Prevention and Control of Gullies. U. S. D. A. Farmers' Bulletin No. 1813. 60 pp. September 1939.
- Protecting Field Borders. U. S. D. A. Leaflet No. 188. 8 pp. December 1939.
- Snow Surveying. U. S. D. A. Miscellaneous Publication No. 380. 46 pp. June 1940.
- Soil Conservation Survey Handbook. U. S. D. A. Miscellaneous Publication No. 352. 40 pp. August 1939.
- Soil-Depleting, Soil-Conserving, and Soil-Building Crops. U. S. D. A. Leaflet No. 165. 8 pp. September 1938.
- Terrace Outlets and Farm Drainageways. U. S. D. A. Farmers' Bulletin No. 1814. 46 pp. July 1939.
- Terracing for Soil and Water Conservation. U. S. D. A. Farmers' Bulletin No. 1789. 60 pp. April 1938.

Illustrated Regional Material

- Northeastern Region.*—Soil Defense in the Northeast. U. S. D. A. Farmers' Bulletin No. 1810. 70 pp. September 1938.
- Southeastern Region.*—The Nichols Terrace: An Improved Channel-Type Terrace for the Southeast. U. S. D. A. Farmers' Bulletin No. 1790. 12 pp. October 1937.
- Kudzu for Erosion Control in the Southeast. U. S. D. A. Farmers' Bulletin No. 1840. 32 pp. December 1939.
- Mulching to Establish Vegetation on Eroded Areas of the Southeast. U. S. D. A. Leaflet No. 190. 8 pp. December 1939.
- Principles of Gully Erosion in the Piedmont of South Carolina. U. S. D. A. Technical Bulletin No. 633. 142 pp. January 1939.
- Soil Defense in the Piedmont. U. S. D. A. Farmers' Bulletin No. 1767. 60 pp. January 1937; revised July 1938.
- Wildlife Conservation Through Erosion Control in the Piedmont. U. S. D. A. Farmers' Bulletin No. 1788. 26 pp. November 1937.
- Ohio Valley Region.*—Conserving Corn Belt Soil. U. S. D. A. Farmers' Bulletin No. 1795. 53 pp. November 1937.
- Saving Soil with Sod in the Ohio Valley Region. U. S. D. A. Farmers' Bulletin No. 1836. 29 pp. December 1939.
- Soil Erosion in the Karst Lands of Kentucky. U. S. D. A. Circular No. 490. 62 pp. December 1938.
- Western Gulf Region.*—Soil Defense in the South. U. S. D. A. Farmers' Bulletin No. 1809. 64 pp. September 1938.
- Upper Mississippi Region.*—Conserving Corn Belt Soil. U. S. D. A. Farmers' Bulletin No. 1795. 53 pp. November 1937.
- From Ridge to River. 14 pp. February 1939.
- Soil and Water Conservation Investigations at the Soil Conservation Experiment Station, Missouri Valley Loess Region, Clarinda, Iowa. Progress Report, 1931-1935. U. S. D. A. Technical Bulletin No. 558. 182 pp. February 1937.
- Southern Great Plains Region.*—Crops Against the Wind on the Southern Great Plains. U. S. D. A. Farmers' Bulletin No. 1838. 74 pp. December 1939.
- Land Facts on the Southern Plains. U. S. D. A. Miscellaneous Publication No. 834. 22 pp. map. 1939.
- Preventing Soil Blowing on the Southern Great Plains. U. S. D. A. Farmers' Bulletin No. 1771. 28 pp. March 1937.
- Problem-Area Groups of Land in the Southern Great Plains. 40 pp., map. February 1939. 80¢.

- Sand-Dune Reclamation in the Southern Great Plains. U. S. D. A. Farmers' Bulletin No. 1825. 13 pp. August 1939.
- Soil Conservation Reconnaissance Survey of the Southern Great Plains Wind-Erosion Area. U. S. D. A. Technical Bulletin No. 558. 63 pp., table. January 1937. Also the soil conservation survey maps of the following counties, and a summarized map of the Southern Great Plains Wind-Erosion Area: Colorado—Bent, Prowers, Baca; Kansas—Hamilton, Stanton, Grant, Morton, Stevens, Seward; Oklahoma—Cimarron, Texas, Beaver; Texas—Dallas, Sherman, Hansford, Ochiltree, Hartley, Moore, Oldham, Deaf Smith.
- Northern Great Plains Area.*—The Land Utilization Program for the Northern Great Plains. Land Utilization Program (formerly Bureau of Agricultural Economics, now Soil Conservation Service). 15 pp. 1938.
- Land Use Adjustment in the Spring Creek Area, Campbell County, Wyoming. 15 pp. 1939.
- Soil and Water Conservation in the Northern Great Plains. 20 pp. 1937.
- Southwest Region.*—Soil Defense of Range and Farm Lands in the Southwest. U. S. D. A. Miscellaneous Publication No. 338. 51 pp. June 1939.
- Pacific Northwest Region.*—Soil and Water Conservation in the Pacific Northwest. U. S. D. A. Farmers' Bulletin No. 1772. 59 pp. July 1937.
- Pacific Southwest Region.*—Effect of Accelerated Erosion on Silting in Morena Reservoir, San Diego County, Calif. U. S. D. A. Technical Bulletin No. 639. 22 pp. December 1939.
- Erosion Losses from a 3-day California Storm. 24 pp. 1939.
- Land-Saving Plans for Conservation in the Pacific Southwest. 24 pp. November 1939.
- Miscellaneous Regional Material.*—Emergency Wind-Erosion Control. U. S. D. A. Circular No. 480. 10 pp. February 1937.
- Future of the Great Plains. Report of the Great Plains Committee. (Also House Document No. 144, 75th Congress, 1st Session.) 194 pp. December 1936.
- Erosion Survey Reports.*—Information regarding the availability of later reports for specific areas may be secured from the nearest field office or the Washington, D. C., office of the Soil Conservation Service.
- No. 1. Erosion and Related Land Use Conditions on the Froid Demonstration Project, Montana. 28 pp. November 1938. 25¢.
- No. 2. Erosion and Related Land Use Conditions on the Beedy Fork Demonstration Area, North Carolina. 21 pp. 1938. 10¢.
- No. 3. Erosion and Related Land Use Conditions on the Minot Area, North Dakota. 37 pp. November 1938. 65¢.
- No. 4. Erosion and Related Land Use Conditions on the Elm Creek Watershed, Texas. 20 pp. January 1939. 10¢.
- No. 5. Erosion and Related Land Use Conditions on the Watershed of White Rock Reservoir near Dallas, Texas. 29 pp. February 1939. 20¢.
- No. 6. Erosion and Related Land Use Conditions on the Seantic River Watershed, Connecticut-Massachusetts. 27 pp. March 1939. 15¢.
- No. 7. Erosion and Related Land Use Conditions on the Muskingum River Watershed. (Ohio.) 36 pp. March 1939. \$1.
- No. 8. Erosion and Related Land Use Conditions on the University Lake Watershed, Chapel Hill, North Carolina. 16 pp. December 1939. 25¢.

- No. 9. Erosion and Related Land Use Conditions on the Spartanburg Municipal Reservoir Watershed, South Carolina. 16 pp. January 1940. 20¢.
- No. 10. Erosion and Related Land Use Conditions on the Lloyd Shoals Reservoir Watershed, Georgia. 26 pp. January 1940. 35¢.

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- No. 11. Erosion and Related Land Use Conditions on the Lake Michie Watershed, near Durham, North Carolina. 19 pp. January 1940. 15¢.
- No. 12. Erosion and Related Land Use Conditions on the Hell and Mud Creeks Demonstration Project, Mississippi. 25 pp. May 1940. 10¢.

DEPARTMENT OF COMMERCE

BUREAU OF FOREIGN AND DOMESTIC COMMERCE

Organic Act of August 23, 1912.

Commerce Appropriation Act of April 29, 1926 (et seq.
Economy Act of 1937).

Act of February 14, 1903.

Act of January 3, 1923.

Act of May 27, 1935.

Brief General Statement of Agency Functions

The Bureau of Foreign and Domestic Commerce is charged with the promotion and development of the foreign and domestic commerce of the United States. It serves as the direct liaison between American business interests and the Government. It assists American business with all the data essential to the sound conduct of trade with foreign countries, including facts and facilities to help American industry place its goods in foreign markets, and provides information as to foreign sources of supply of raw materials indispensable to American enterprise. It brings specific foreign trade opportunities to the attention of businessmen, provides data to enable the businessmen to route shipments economically and advantageously, aids in the protection of American business interests abroad, such as trade-marks and patents, reports on world stocks of raw materials and keeps constantly in touch with prices, and administers the China Trade Act—a law authorizing the creation and assistance of corporations engaging in business with China.

The Bureau maintains regional, district, and cooperative offices in the more important commercial centers of the country, thereby coming into close contact with the American business public.

In the field of domestic commerce the Bureau serves as the principal liaison between the policy makers in business and Government. The Bureau's facilities are directed toward three major ends, namely: (1) Assembling, analyzing, and reporting current business information of assistance to businessmen and other Government agencies; (2) conducting factual studies designed to create a better understanding of the national economy; (3) promoting closer and mutually cooperative relationships between leaders in business and Government.

The Bureau's activities embrace broad surveys of general business conditions, analyses of current trade problems, and research in basic economic factors such as national income and consumer spending power, distribution costs, and construction problems.

The Bureau undertakes to provide American manufacturers, wholesalers, and retailers with accurate and specific data upon which to base efficient merchandising methods. Comprehensive surveys of credit problems and bad-debt losses are vital aspects of the work.

Among recent new series, a monthly survey has been initiated to meet the need of businessmen, economists, and statisticians for current and comprehensive data measuring the month-to-month fluctuations in the value of manufacturers' inventories, new and unfilled orders, and shipments.

The Bureau has 12 industrial divisions which render essential services in behalf of the country's foreign trade in each of 12 industrial classifications. In the domestic field these divisions analyze currently the flow of trade in certain commodities and consider conditions in individual industries in relation to those in business as a whole, as well as the types of operating policies in the several industries which appear to be most effective in dealing with specific current situations.

In addition to the industrial divisions and the district offices or field service, separate divisions are set up to include the following subjects:

Business Review.—The publication and editing of the Survey of Current Business, intensive analysis of business conditions and business prospects, and the construction of indexes measuring the flow of trade, including the monthly industry survey measuring month-to-month fluctuations in the value of manufacturers' inventories, new and unfilled orders, and shipments.

National Income.—Estimates of national income by sources and of income paid out by type of payment, research in the field of capital formation and final product analysis, estimates of public and private debt, and estimates of construction activities and collection of data on residential vacancies, prepared regularly.

Marketing Research.—Developing basic data for measuring market potentials, developing from case studies information regarding the relative merits of the several practices employed in handling various phases of the different marketing functions, and in general, research, analysis, and publication of material designed to be of direct aid to the businessman in his practical operations.

Regional Information.—Economic data for various world regions.

Finance.—International financial and economic questions, foreign securities in the United States, investment of American capital abroad, and general aspects of foreign trade financing.

Foreign Tariffs.—Collection and dissemination of information regarding foreign tariffs and the related conditions of movement of goods between countries.

Foreign Trade Statistics.—Import and export statistics, showing the articles imported and exported and the countries from which imported or to which exported.

Transportation.—Information on freight rates, services, and facilities both rail and ocean, enabling shippers to route foreign shipments economically; matters and facilities pertaining to world communications, including telephone, telegraph, cable, radio, and postal communications.

Commercial Laws.—Information concerning commercial laws and judicial procedure, pertaining to both foreign and domestic business, and including material on the legal aspects of construction enterprises.

Commercial Information.—General reference and inquiry work of the Bureau and distribution of the Bureau's services to business, including functions of the Commercial Intelligence, Editorial, and Correspondence Divisions.

Activities Affecting and Assistance to Local Planning

The Bureau of Foreign and Domestic Commerce assists local planning agencies in developing the industrial and commercial facilities of the community. This service is made possible through the collection, analysis, and tabulation of certain consumption and industrial statistics, and the preparation of other reports useful in this field. Handbooks are compiled by counties and by cities of 2,500 or more population and advisory service is rendered with reference to source material and procedure in analyzing markets and plant location problems.

Statistics on national income and income by States, and on construction activities are collected and analyzed. A special survey in the field some 10 years ago developed specific information as to what selected communities were doing in the field of advertising for community promotion. Services are maintained which provide data on sources of regional business indicators. Special trading area studies are provided outlining the markets for various trades and industries in the United States. Lists of national, interstate, and local trade associations are compiled and full informational services are available on trade associations for any part they may play in local planning.

Through the district offices maintained by the Bureau of Foreign and Domestic Commerce in important business and industrial centers, assistance is rendered to those in the various localities wishing to work up data for local planning, and reports issued by the Bureau may be examined at and purchased through these offices.

Local Planning Data and Information Available

1. **Market Research Series.** (Available from the Marketing Research Division, Bureau of Foreign and Domestic Commerce, Washington, D. C., or district offices.)

Trade and Professional Associations of the United States—National and Interstate, 1940 edition. (In preparation.)

Consumer Use of Selected Goods and Services, by Income Classes:

No. 5.1 through No. 5.12, covering 51 cities, 10¢ and 25¢.

No. 6. Check Sheet—Introduction of New Industrial Products. 10¢.

No. 17. Effect of City Water and Sewerage Facilities on Industrial Markets. 10¢ (Out of print).

No. 18. Patterns of Stores, Sales, and Population in the United States. 10¢.

No. 19. Atlas of Wholesale Grocery Trading Areas. \$1. Atlas of Wholesale Dry Goods Areas. (In preparation.)

Sources of Regional and Local Current Business Statistics.

(In press.)

Basic Industrial Markets in the United States; No. 14.1 through No. 14.8 covering the Textiles, Iron and Steel, Gas and Electric Utilities, Pulp and Paper, Paint, Varnish, and Lacquer, and Commercial Power Laundry Industries.

2. **Domestic Commerce Series.** (Available from Superintendent of Documents, Washington, D. C., or through district offices of the Bureau of Foreign and Domestic Commerce.)

No. 102. Consumer Market Data Handbook, 1939. \$1.75.

No. 105. Suggestions for Use in Making a City Survey. 10¢.

No. 107. Industrial Market Data Handbook of the United States, 1939. \$1.75.

No. 110. Market Research Sources, 1940. 25¢.

No. 112. Retail Credit Survey, 1939. (In press.)

3. **Miscellaneous.** a. (Available from the Superintendent of Documents, Washington, D. C., or district offices.)

Survey of Current Business—a monthly publication consisting of 56 pages of interpretative text, charts, and statistics affording a comprehensive review of business trends. Contains a limited number of regional statistics. \$2 per year.

b. (Available from the Bureau of Foreign and Domestic Commerce, Washington, D. C., or district offices.)

State Income Payments, 1929-39.

c. (Available from the Division of Commercial Intelligence, Bureau of Foreign and Domestic Commerce, Washington, D. C., or district offices.)

Domestic Commerce—provides a running record of new research and other current information in the field of marketing and business gathered from numerous Governmental and non-Governmental organizations. Published on the 10th, 20th, and 30th of each month. \$1 per year.

The Business Information Service—provides data on subjects pertaining to business problems through the medium of basic data sheets and abstracts which are compiled from both Governmental and non-Governmental sources. Subscription price, complete file with current revision and addition service, \$10 per year, for private companies. This service is available for reference at the district and cooperative offices in the field.

BUREAU OF THE CENSUS

Article I, Section 2, of the Constitution of the United States.

Act of March 6, 1902.

Specific Legislation for Various Additional Inquiries by the Bureau of the Census.

Brief General Statement of Agency Functions

The Bureau of the Census is a fact-finding and research agency. It collects, compiles, and publishes at intervals ranging from one week to ten years statistics relating to the social, economic, and industrial life of the inhabitants of the United States and its outlying and insular possessions. In addition, the Bureau performs special advisory, research, and tabulating services for local governmental and other agencies. Data collected by the Bureau are of especial value to local planning agencies as factual and statistical background for the past, present, and future. Information on the number and characteristics of the population as well as its social and economic activities is obtained for small geographic areas, including individual cities, towns, and villages; townships and other minor civil divisions; as well as for counties and larger geographic areas. These are the geographic units for which information is most frequently in demand for local planning activities.

The principal functions of the Bureau include taking the decennial census of population, occupations, unemployment, and families; the quinquennial census of agriculture, together with decennial censuses of irrigation, drainage, and horticulture; a biennial census of manufacturers; and decennially and at certain other dates a complete census of most fields of business. The 1940 decennial census includes, also, a census of housing. The Bureau collects and compiles statistics of births and deaths, and statistics relating to the operations of State and local governments. It takes a decennial census of religious bodies, and special surveys and censuses at various dates as required. The Bureau also collects and compiles current business statistics including monthly, quarterly, and other periodic inquiries relating to orders, production, stocks, sales or shipments, and other facts for a number of important industries, types of business, or commodities; and special statistics on cotton ginnings, consumption, stocks, and spindle activity are collected currently.

Activities Affecting and of Assistance to Local Planning

The Bureau of the Census makes special statistical surveys or tabulations for other branches of the Federal Government, for local governments, and for private individuals and organizations. When the local agencies do not have the facilities for doing the work, arrange-

ments can be made for having studies conducted by the Bureau at the expense of the interested agency. The Bureau's mechanical tabulation facilities are especially valuable as a means of introducing economies in the compilation and analysis of data. The technical staff of the Bureau is prepared to give advice on the formulation of statistical studies involving the collection and compilation of data both from the viewpoint of improving the quality of the statistics and of conducting the survey in the most economical manner possible.

Many special censuses of towns, cities, and counties are conducted by the Bureau at intercensal dates, in cooperation with and at the expense of the communities concerned.

Much unpublished material of both a current and historical nature is available in the files of the Bureau. This material can be made available for small geographic areas, and may be had for the cost of compilation or transcription. The Census also performs service both to individuals and local communities by searching census records in order to establish age, citizenship, or nativity of individuals, and provide genealogical data.

Local Planning Data and Information Available

The activities of the Bureau are designed primarily to furnish information of value for national, State, and local and business planning. The principal aspects of Bureau activities which furnish data of value for local planning are:

Population

The Bureau of the Census provides every 10 years the official count of the population of the United States and of its outlying possessions. Much of the data are available for local areas: Towns, villages, townships, and other small civil divisions, as well as for cities, counties, and States. Similar information is available for wards or census tracts of the larger towns and cities. The basic population information collected in all recent censuses includes age, sex, race, marital status, nativity, citizenship, school attendance, and occupations of the population. The censuses of 1930 and 1940 also have included unemployment statistics and extensive presentations of family information, including composition of the family, tenure, and value or rental of the home, and characteristics of the heads of families. Im-

portant population information included in the 1940 census for the first time relates to internal migration, and to the employment status and income of the population.

The 1940 census includes, also, a census of housing, containing information on the size, rentals, and values, condition, facilities, and equipment of the Nation's dwellings; on the vacancies; and on the mortgage status and financing of owner-occupied dwellings. Housing data will be made available for very small local areas and will be especially valuable for local planning. Statistics on housing will be published by blocks for cities of 50,000 or more inhabitants.

The 1940 census was taken as of April 1, 1940, and is now in process of compilation. Preliminary statistics will begin to be released almost immediately, and more information will be made available in the form of both preliminary releases and final publications throughout the next 2½ years. The official population counts for all areas throughout the United States will be completed not later than November 1940.

Agriculture

The census of agriculture is taken quinquennially, in the years ending in 0 and 5. The agriculture census is supplemented decennially by censuses of irrigation, drainage, and horticulture. The census of agriculture provides a great deal of information for counties, and for townships and other minor civil divisions which is of especial value for local planning. Information available includes tabulations concerning size and tenure of farms, acreages of farm land used for different purposes, farm crops, livestock and livestock products, farm employment, selected income and expenditure items, farm facilities and values, mortgages, and other farm subjects.

Vital Statistics

The Bureau collects, compiles, and publishes statistics on births, stillbirths, infant mortality, mortality, and accidents. Much of the information is available for counties, and for towns and cities of 2,500 or more population. The analytical tables on causes of death, and on age, sex, and other characteristics of persons dying are of material value in planning public health programs. The statistics on infant and maternal mortality have proved exceedingly useful in reducing the maternal and infant death rates. A Weekly Health Index giving death rates for a number of large cities, an Accident Bulletin, and special reports on vital statistics are issued by the Bureau.

The collection of statistics on marriage and divorces which was carried on for a few years by the Bureau and then discontinued in 1933 is being resumed on an improved basis, beginning with statistics for the year 1939. These statistics are collected for those States which have adequate record systems. The Bureau compiles, annually, statistics of crime and prisoners, insane and mental defectives, and decennially, statistics of other delinquent and dependent classes.

Manufactures and Business

Every 2 years a census of manufactures is taken. Reports are issued by industries and by geographic areas which include information on number of establishments, wages, wage earners, quantity and value of products, materials consumed, equipment, and other subjects. Important for local planning purposes are reports relating to the distribution of industries by counties.

A census of business was taken as part of the 1930 decennial census, and is being taken again as part of the present census. Special censuses were taken, also, in 1933 and 1935. This census obtains information by detailed kinds of business on number of stores, sales, employment, and other subjects for wholesale and retail trade. Statistics are collected, also, for service establishments, construction, and other types of business.

State and Local Government

The principal items of revenue, expenditures, indebtedness, valuations, and tax levies are collected annually for States and for cities of 100,000 or more inhabitants, and decennially data are collected on wealth, debt, and taxation for most governmental units in the United States. Digests of State laws on income and estate taxes are also available. A quarterly survey of employment and pay rolls for local governmental units has recently been undertaken. Numerous special reports and studies concerning State and local governmental units are prepared.

Publications

Since almost all census publications contain statistics which are of interest to local planning agencies, it is not feasible to name all of them here. "Census Publications," a list of publications available for sale, is issued by the Superintendent of Documents, Washington, D. C. This list may be consulted by all planning organizations for sources of basic data, as may those census reports available in local libraries.

COAST AND GEODETIC SURVEY

Act of Congress of Feb. 10, 1807 (2 Stats. L-413).

Act of Congress of July 10, 1832 (4 Stats. L-571).

Brief General Statement of Agency Functions

The Coast and Geodetic Survey, organized in 1816, is the oldest and only strictly mapping organization of the Federal Government.

Briefly, the general functions of the Survey are:

1. Surveying the coastal waters of the United States and its territorial possessions and reproducing the results on marine charts.

2. Conducting the geodetic control surveys which form the essential basis of all accurate charting and mapping activities by providing the horizontal position and elevation above or below sea level of a large number of control points as a means of:

(a) Coordinating coastal control for charting along the Atlantic, Gulf, and Pacific coasts;

(b) Furnishing basic geographic control for the demarcation of State and other political boundaries;

(c) Furnishing fundamental control required in obtaining accuracy and uniformity for general mapping and for engineering projects;

(d) Providing gravity observations to furnish basic data for geophysical prospecting.

3. Making such topographic surveys of a narrow strip along the coast as may be essential to include prominent landmarks helpful in guiding the navigator.

4. Conducting the tidal and current surveys necessary to establish datum planes on which all topographic surveys on land and all hydrographic surveys at sea must be based, and to make possible the accurate prediction of the rise and fall of the tides and the velocities of currents.

5. Making magnetic observations throughout the country in order to establish the amount of magnetic variation, knowledge of which is essential to the use of the magnetic compass for navigation and surveying.

6. Preparing and publishing coast pilots, tide tables, current tables and other information essential to safe navigation of the sea and to certain operations in surveying on land and water.

7. To produce, under the auspices of the Civil Aeronautics Authority, aeronautical charts of the United States and possessions essential to aviation.

Activities Affecting and Assistance to Local Planning

Broadly, it may be said that all the work of the Survey is a contribution to national and local planning. The data resulting from its work are indispen-

Act of Congress of Mar. 3, 1871.

Act of Congress (16 Stat. L-508).

sable in the study of problems concerning the conservation and development of natural resources, and for engineering and construction projects.

Land planning is dependent on data obtained directly from maps or from the essential basic surveys from which maps are made. While the geodetic work of the Survey does not furnish the map, it does furnish the fundamental framework on which the map is built and without which no land planning or comprehensive engineering can be properly executed.

Although its data are basic and indispensable to planning, the Survey does no local planning except in its own field of operations or work closely related thereto. Its assistance to planning consists principally of geodetic information comprising horizontal and vertical control data in the interior, and hydrographic information regarding our coastal borders both for the United States and its possessions.

The Survey cooperates with various organizations engaged in similar activities, even though the work is of local nature, provided the standard of accuracy is sufficient for coordination with the Federal surveys. The scope of these projects, however, limits such cooperation generally to the review of proposed projects or to furnishing technical advice based on the experience of the Survey in the particular problems involved.

The triangulation system of the Coast and Geodetic Survey covers the entire United States and includes about 90,000 stations. The geographic positions of these stations, namely the latitudes and longitudes, as well as the distances and directions between adjacent stations are available. At each modern station a local azimuth has been determined for the benefit of the engineer or surveyor engaged in local projects in order that he may coordinate his own work to that of the national net. By so doing it is possible for him to make a permanent record of his own survey which can be reproduced by a competent engineer at any future time. Where such a survey is properly done and monumented, it also becomes of future use in adjacent surveys.

The vertical control system of the country consists of precise elevations of more than 150,000 bench marks distributed over the United States. Several lines of levels and several hundred bench marks comprise the Alaskan net. The great diversity of purposes for which elevations are useful is obvious. They are essential in mapping, engineering, city planning, and all construction and engineering projects.

The distribution of neither the horizontal nor the vertical control stations is at present adequate for the

needs of the country. Much more work must be done. There are many regions in the western part of the country, particularly, where no stations exist in areas as much as 150 miles in diameter. However, the stations and bench marks in existence are distributed as best to meet the urgent needs of the Nation.

The tidal and current work of the Bureau is of great importance in planning projects along the borders of tidal waters. The level net of the United States is based on many connections to sea level elevations along the Atlantic, Gulf, and Pacific coasts. The rise and fall of the tide is very important not only to navigation but also to engineering projects which touch the sea or the tidal estuaries thereof.

The variation of the magnetic compass is an important element in marine and aerial navigation, in retracing old magnetic surveys, in geophysical investigations, in the search for minerals, etc., and for many other activities. The Bureau publishes isogonic charts and declination tables at frequent intervals showing the variation of the magnetic compass with the annual changes in the United States. While modern mapping is not based on magnetic meridians, no survey is complete unless the magnetic declination be determined and recorded for possible future use for any one of several purposes.

Local Planning Data and Information Available

The Bureau publishes nearly 800 nautical charts on various scales depending on the locality of the chart and its general purpose. Of these, the large scale charts are particularly valuable in planning, especially where knowledge of the delineation of the shore line, depths of water, bottom characteristics, or similar features are essential. Plans frequently involve questions of the encroachment of the sea or of land accretion. Old survey records and charts are most valuable for such purposes and are often used in riparian court claims.

The Bureau publishes also 110 aeronautical charts which are valuable for planning and for any activity involving aviation generally, such as airports, landing fields, air routes, etc.

The nautical and aeronautical charts are listed in detail with regard to size, scale, general features and purposes in a chart catalog, serial No. 606, attached to this report. This catalog also includes charts of all our foreign possessions.

Publications

(a) Many of the publications referred to immediately below are manuals of field work and do not furnish data of direct use for planning. The manuals outline

methods and procedure, field instructions, etc., which govern the field operations that finally result in the data themselves. Publications containing data alone are listed under heading II below.

- I. 1. Aeronautical charts of the United States (includes *Manual of Practical Air Navigation*, Sp. Pub. 197).
2. Astronomical work (includes manual, Sp. Pub. 14).
3. Cartography (includes map-projection tables, Sp. Pubs. 5, 52, 153; a manual on projections, Sp. Pub. 68; and a manual on cartography, Sp. Pub. 205).
4. Coast and inside route pilots.
5. Geodesy (includes manual on the figure of the earth and isostasy, Sp. Pub. 82).
6. Gravity (includes manual on isostatic reductions, Sp. Pub. 10, and one on gravity determinations, Sp. Pub. 69).
7. Hydrography (includes manual on use of wire drag, Sp. Pub. 118, and one on hydrography, Sp. Pub. 143).
8. Leveling (includes many publications of elevations and a manual, Sp. Pub. 140; for publications containing data, see heading 2 below).
9. Nautical charts (as listed in chart catalog attached herewith).
10. Terrestrial magnetism (includes several publications of magnetic data and charts, and a manual on measurements, Serial 166).
11. Tides and currents (includes annual tide and current tables along United States coasts and manuals on tide observations, Sp. Pub. 196 and on current observations, Sp. Pub. 215).
12. Topography (includes manual Sp. Pub. 144).
13. Triangulation and traverse (includes many publications of geographic positions and several manuals. For manuals see especially Sp. Pubs. 8, 28, 65, 71, 93, 120, 137, 138, 145, 158, 159, 193, 194, 195 and 200. For publications containing data see heading II below).
- (b) Catalog of Nautical Charts, Coast Pilots, Tide Tables, Current Tables, Tidal Current Tables, and Aeronautical Charts.
- (c) Bibliographic Geodesique Internationale, published every 3 or 4 years (two volumes now available).
- (d) Annual Reports of the Director of the Coast and Geodetic Survey.
- (e) Index maps for each State, showing location of arcs of triangulation, lines of levels and traverse.
- II. Publications listed below are principally for furnishing control data in form for immediate use by planning agencies. These publications contain data resulting from field work completed several years ago and include only a small part of the total data available in manuscript or some preliminary form.
- Several States have published control data resulting from cooperative Works Progress Administration projects usually assisted in considerable measure by this Bureau. Such data are available for planning in Massachusetts, Georgia, Florida, Louisiana, Missouri, and Arkansas. A number of States are now engaged in similar work but the data are available only in preliminary form.
- The following publications contain control data essential for planning:
 - Sp. Pub. 11, Texas-California are of primary triangulation.
 - Sp. Pub. 16, Triangulation, west coast of Florida.
 - Sp. Pub. 19, Primary Triangulation, 104th meridian and 39th parallel, Colorado, Utah, and Nevada.
 - Sp. Pub. 30, Triangulation, West Virginia, Ohio, Kentucky, Indiana, Illinois, and Missouri.
 - Sp. Pub. 46, Triangulation in Maine.

Sp. Pub. 156, Triangulation in Hawaii.
Sp. Pub. 190, Triangulation in Colorado.
Sp. Pub. 164, Triangulation in Southeast Alaska.
Sp. Pub. 176, Triangulation in Oregon.
Serial 347, Use of Coast and Geodetic Survey Data in Surveys of Farms and Other Properties.
Sp. Pub. 179, Triangulation in Kansas.
Sp. Pub. 183, Triangulation and Traverse in Louisiana.
Sp. Pub. 188, Triangulation in Missouri.
Sp. Pub. 187, Triangulation and Traverse in Arkansas.
Sp. Pub. 189, Triangulation in Texas.
Sp. Pub. 190, Triangulation in Oklahoma.
Sp. Pub. 192, Triangulation and Traverse in North Carolina.
Sp. Pub. 198, Triangulation in Tennessee.
Sp. Pub. 202, Triangulation in California.
Sp. Pub. 203, Triangulation and Traverse in Minnesota.
Sp. Pub. 209, Triangulation in Utah.
Sp. Pub. 212, Triangulation in Wyoming.
Sp. Pub. 214, Triangulation in Michigan.

Sp. Pub. 219, Triangulation in New Mexico.
Sp. Pub. 220, Triangulation in South Carolina, Part I, Northwestern Part.
Serial 572, Description of Bench Marks.
Sp. Pub. 95, Leveling in Georgia.
Sp. Pub. 131, Description of Bench Marks in United States.
Sp. Pub. 161, Leveling in Hawaii.
Sp. Pub. 163, Leveling in Alaska.
Sp. Pub. 172, Leveling in New Jersey.
Sp. Pub. 176, Leveling in Michigan.
Sp. Pub. 177, Leveling in Oregon.
Sp. Pub. 181, Leveling in Massachusetts, Rhode Island, and Connecticut.
Sp. Pub. 182, Leveling in New Hampshire and Vermont.
Sp. Pub. 184, Leveling in Maine.
Sp. Pub. 185, Leveling in Florida.
Sp. Pub. 188, Leveling in Arkansas.
Sp. Pub. 210, Leveling in North Carolina.

DEPARTMENT OF JUSTICE

BUREAU OF PRISONS

Public, No. 218, 71st Congress, approved May 14, 1930 (U. S. C. 18-753), Act of Congress of May 27, 1930.

Act of Congress, approved June 23, 1934, and Executive Order 6917 December 11, 1934.

Brief General Statement of Agency Functions

The Bureau of Prisons administers the Federal Government's penal and correctional activities. It is responsible for the safekeeping, care, protection, instruction, and discipline of all persons charged with or convicted of offenses against the United States and in the Bureau is vested the control and management of all Federal penal and correctional institutions save those maintained by the Army and Navy. The Bureau also has specific administrative responsibilities with reference to the Federal parole system and probation in the United States Courts.

The major functions of the Bureau of Prisons are: (1) The management of Federal penal and correctional institutions, (2) the management of Federal prison industries, (3) the supervision of Federal prisoners in non-Federal institutions, (4) the custody of juveniles committed under the Federal Juvenile Delinquency Act, and (5) parole administration. In pursuing these functions the Bureau is guided by the fundamental policy that whatever action is taken with reference to a violator of the law must be directed toward the protection of society through the rehabilitation of the individual offender.

Activities Affecting and Assistance to Local Planning

1. *The Management of Institutions.*—There are 29 penal institutions under the Federal Bureau of Prisons, and two institutions for narcotic addicts under the supervision of the United States Public Health Service which receive Federal offenders. These are located in 24 States and the District of Columbia. In accordance with the congressional act of May 27, 1930, authorizing the construction of new institutions, institutional units vary in type and facilities. They are classified into penitentiaries, reformatories, correctional institutions, prison camps, a medical center, and a training school for boys.

2. *The Management of Prison Industries.*—By congressional act, the productive industries carried on in

Federal penal and correctional institutions are a Government corporation under the terms of Executive Order 6917, December 11, 1934. The industrial operations of this corporation, Federal Prison Industries, Inc., are diversified, insofar as practicable, to the end that no single private industry will bear an undue burden of competition. The industries operate entirely on the "state use plan," selling only to Government agencies and offering no goods for sale on the open market.

3. *Supervision of Federal Prisoners in non-Federal Institutions.*—It is necessary for the Federal Government to arrange with non-Federal institutions for the care of large numbers of persons awaiting trial or serving short sentences. The Bureau requires certain minimum standards of care and treatment, and a force of inspectors, all under civil service, is constantly in the field inspecting institutions which have or desire to make contracts for boarding Federal prisoners. The amount paid to local institutions varies with the standard of care furnished. On June 30, 1940, out of 3,078 local jails inspected, 483 had been approved for Federal use as sufficiently safe, sanitary, and properly operated to house Federal prisoners, 314 had been approved for emergency use, and 2,281 had been disapproved.

4. *Federal Juvenile Delinquency Act.*—Under the terms of the Federal Juvenile Delinquency Act, a juvenile 17 years of age or under may be committed to the custody of the Attorney General, and the Attorney General may designate any public or private agency for the custody, care, subsistence, education, and training of the juvenile during the period for which he was committed. On February 29, 1940, there were 568 juveniles committed to the Attorney General. Of these, 396 were housed in Federal institutions and 149 in State institutions, and 23 were cared for by private noncorrectional schools, foster homes, or social service agencies.

5. *Parole Administration.*—Federal prisoners serving sentences in excess of one year are eligible to be considered for release on parole when they have served one-third of the sentence imposed by the court. The authority to grant parole is vested in the United States

Board of Parole, consisting of three members appointed by the Attorney General. The Board is independent in its action with respect to parole but it is placed in the Bureau of Prisons for administration and it uses the services and records of the Bureau. The supervision of parolees and those who leave institutions on conditional release (with statutory reduction of sentence for good time) is a function of the probation officers attached to the United States District Courts.

The Bureau of Prisons is essentially an administrative agency dealing with Federal penal and correctional problems. However, it stands ready to advise local

penal and correctional authorities with respect to prison construction; administration; personnel training; classification; prison industries; prisoner education, including religious instruction; and parole supervision.

Local Planning Data and Information Available

The Bureau of Prisons has bibliographies in the field of crime prevention, delinquency, and general criminology available for distribution and many of its reports and publications contain material of value to local penal and correctional authorities.

FEDERAL BUREAU OF INVESTIGATION

Administrative Order of Att. Gen. Bonaparte of July 26, 1908.

Administrative Order of Att. Gen. Wickersham of March 16, 1909.

Section 266, Title 5, U. S. Code—Section 300 (a) and Section 340.

Executive Order of Jan. 1935.

General Introductory Statement

The Federal Bureau of Investigation is an integral part of the United States Department of Justice. It undertakes to serve as a national clearing house for activities, information, and research on law enforcement, crime prevention, the trend, extent, and fluctuation of crime, the raising of the standards of law-enforcement personnel, and to act as a general coordinating agency in the field of law enforcement and in the apprehension of criminals.

It undertakes further to investigate matters coming within the investigative jurisdiction of the Federal Government, which are not specifically assigned by Congress or otherwise to some other Federal investigating agency.

The Federal Bureau of Investigation is charged with the duty of investigating violations of laws of the United States, collecting evidence in cases in which the United States is or may be a party in interest and performing such other duties as are prescribed by law. Although the Federal Bureau of Investigation does have, by congressional authority, jurisdiction over all matters requiring investigation in which the United States is or may be a party in interest, there have been established certain other Federal investigating agencies with jurisdiction over specific types of investigations. The Attorney General of the United States, therefore, has issued instructions that in order to avoid duplication of expenditure and manpower, this Bureau is to give its attention only to those matters which have not been assigned by Congress to some other investigating agency.

The very structure of the local governments with jurisdiction over the apprehension of criminals and

the enforcement of laws being limited by political boundaries of municipalities, counties and States, naturally requires that there be in existence some clearing-house and coordinating agency which is able by means of adequately trained personnel to render assistance to the municipal, county, and State law enforcement organizations in the problems which are presented because of such limitations upon jurisdiction and authority. The Federal Bureau of Investigation serves as such coordinating agency and national clearing-house on law-enforcement activities.

Brief General Statement of Agency Functions

General Functions and Policies.—The Federal Bureau of Investigation conducts investigations of matters both civil and criminal, in which the United States Government is or may be interested, when such matters may not have been assigned by Congress to some other investigating agency. Numerous criminal statutes are enforced by the Bureau and investigations conducted in various types of civil matters in which the Government is interested. The inability of municipal, county, and State courts in many instances to meet the expenses for the prosecution of numerous violations because of jurisdictional limitations, requires that the facilities of the Bureau be made available to detect and apprehend criminals who violate a Federal criminal statute even though the same or related acts might likewise constitute a violation of a local or State statute. In recent years Congress has enacted several laws which permit the Bureau to cooperate with local and State governments in the enforcement of laws by granting to the

Federal courts jurisdiction over crimes which have an interstate character.

The Bureau operates the Federal Bureau of Investigation National Police Academy, which trains carefully selected officers from local and State police organizations so that they may return to their police agencies following graduation and give the benefit of their training and experience to other members of their respective organizations.

The Federal Bureau of Investigation maintains a scientific and technical laboratory, with a staff of well trained personnel to make scientific studies of latent evidence for its own use in investigative problems. This laboratory receives from Federal, local, county, and State law enforcement agencies evidence which needs scientific analysis and study.

The Federal Bureau of Investigation serves as a national clearinghouse for statistics on crime, thereby reflecting the extent, trend, and the fluctuation of crime within the United States.

The Bureau serves as a clearinghouse for information concerning the activities of individual criminals throughout the country.

The Identification Division maintains extensive fingerprint identification files, and carries on work related to this activity.

A national stolen property file is also maintained in the Federal Bureau of Investigation.

Specific Programs and Procedures.—The investigation program of the Federal Bureau of Investigation includes among those more frequent types of investigations conducted by the Bureau the following:

Administrative Investigations.
Admiralty Law Violations.
Antitrust Laws.
Applicants for Positions.
Bank Embezzlements in District of Columbia.
Bankruptcy Frauds.
Bondsmen and Sureties.
Bribery.
Claims against the United States.
Claims by the United States.
Condemnation Proceedings.
Conspiracies.
Contempt of Court.
Copyright Violations.
Crimes on the High Seas.
Crimes in Alaska.
Crimes in Connection with Federal Penal and Correctional Institutions.
Crimes on Indian Reservations.
Crimes on Government Reservations.
Destruction of Government Property.
Espionage.
Extortion Cases.
Federal Anti-Racketeering Statute.
Federal Kidnaping Act.
Federal Reserve Bank Act.
Frauds Against the Government.

Harboring of Federal Fugitives.
Illegal Wearing of Service Uniforms.
Impersonation of Federal Officials.
Interstate Transportation of Explosives.
Interstate Flight to Avoid Prosecution or Testifying in Certain Cases.
Intimidation of Witnesses.
International Claims.
Killing or Assaulting Federal Officer.
Larceny from Interstate Shipments.
Location of Escaped Federal Prisoners.
Migratory Bird Act.
National Bank Act.
National Motor Vehicle Theft Act.
National Stolen Property Act.
Neutrality Violations.
Obstruction of Justice.
Peonage Statutes.
Passports and Visas.
Patent Violations.
Parole and Probation Violations, Federal.
Perjury.
Personnel Investigations.
Red Cross Violations.
Robbery of National Banks, Member Banks of Federal Reserve System, and Insured Banks of the Federal Deposit Insurance Corporation.
Sabotage.
Theft of or Embezzlement of Government Property.
Treason.
Veterans' Administration Violations.
White Slave Traffic Act.

The program includes the collecting, compiling, and publishing of statistics on crime, up-to-date and as thorough and complete as possible. The constant enlargement of the more than 13 million fingerprint cards in the fingerprint identification work of the Fingerprint Identification Division is part of the Federal Bureau of Investigation program, as is the further development of the F. B. I. Police Academy and the F. B. I. Technical Laboratory.

Activities in and Assistance to Local Planning

In many types of investigation, the Federal Bureau of Investigation renders a direct aid to the local enforcement agencies. For example, in cases involving such offenses as larceny from interstate shipments, the National Motor Vehicle Theft Act, the White Slave Traffic Act and impersonation investigations, as well as many others, there will be found a local or State law which provides a penalty under which the violators of the above statutes might be punished in State courts. The problem of returning the fugitive criminal to the jurisdiction where the crime was committed, the interstate character of some of the above crimes and the inadequate funds of the local law-enforcement agencies and local courts make it important for the Federal Bureau of Investigation to conduct investigations leading to the

prosecution of the violator in the Federal court, thus making certain that justice is administered. Some of the classifications permit the Federal Bureau of Investigation to be of direct and specific aid to the local law-enforcement organization in the prosecution of an offender in the State courts. For example, under an act providing a penalty in the Federal court for the unlawful flight in interstate commerce of a criminal to avoid prosecution in the State courts for certain major violations, it is possible for the Federal Bureau of Investigation to locate the criminal in another State and have him removed by lawful processes to the State where the violation was originally committed, thus permitting the prosecution of this individual not only in the State courts for the substantive offense but also in the Federal courts for the unlawful flight. The same statute likewise provides a penalty for the flight in interstate commerce of a witness for the purpose of avoiding the giving of testimony in a felony case pending in the State courts. This is typical of a number of instances whereby direct and specific aid is given to local authorities who are restricted by the limited jurisdiction.

The F. B. I. National Police Academy aids in the training of local personnel, and through its training facilities, aids programs of training conducted locally for police throughout the country. Standards of law-enforcement personnel within the United States are being raised in an effort to cause law enforcement to be recognized as a profession. Of the 478 graduates of the Police Academy to date, 75 percent of them are engaged in training and approximately 40 percent have received promotions to a higher administrative position in their respective departments, and they make available this advanced training to more than 84,765 law-enforcement officers constituting the personnel of their respective agencies.

Application and personal-history forms are used in making applications to attend the academy and these will be provided to any law-enforcement agency requesting them. The application must be made by the chief of police, by the sheriff, by the superintendent of State police or highway patrol, or by some official of higher rank. The application form likewise nominates a representative of the department to take such training. There is attached to the application blank a personal-history record form which is filled out by the officer nominated, showing his previous experience, his personal history and references, which serve as a basis for an investigation by the F. B. I. The applications are then given consideration in the order in which they are received.

The Federal Bureau of Investigation, upon request, will aid any local police agency in determining the needs of the personnel of such agency for training; in pre-

paring a program to meet these needs; in assigning instructors from its own staff, and from other sources when desired, to aid in conducting local schools for the police; and in serving in an advisory or consultant capacity in connection with any locally operated police training school.

The facilities of the Technical Laboratory are available to police agencies of municipalities, counties, and States. Evidence forwarded by the local agency to the Federal Bureau of Investigation is studied and analyzed, and a report of the findings of the experts is forwarded to the agency submitting this evidence. When requested, members of the technical staff proceed without expense to the local agency to testify in the trial of the case in the local courts. There is no charge to the local police agencies for this service. In programs of local planning, the availability of the F. B. I. Technical Laboratory will make unnecessary expenditures for laboratory equipment and technical personnel, since this work will be performed for the local agencies by the F. B. I. Every State in the United States and the District of Columbia submitted specimens and latent evidence for scientific study to the F. B. I. Technical Laboratory during the first 11 months of the fiscal year to end June 30, 1940. The total number of scientific examinations during this period was 6,595. Many of these examinations involved a study of numerous specimens and exhibits, so that the total number of specific items of all kinds examined during this period exceeded 38,000.

Crime statistics, such as those indicating the type frequency of various crimes in the United States, the percentage of women criminals, the frequency of arrest by age classification, and the rates of arrest for the native white and colored population and the foreign-born population, are collected, compiled, and published by the Bureau and speak for themselves as direct contributions to any constructive program of local planning in the field of crime prevention and law enforcement. There were during the year 1939, 4,367 police agencies in the United States contributing crime statistics to the Federal Bureau of Investigation. These are direct contacts between the F. B. I. and local police. Of this total, 2,698 of the agencies are city and village police departments, representing a total population of 67,964,488. 1,658 sheriffs and State police units contribute statistics of this type, and 11 police forces in territories and possessions of the United States. Ninety-four percent of the cities of 10,000 population and over are included in these reports, representing a total population in these cities of 98.2 percent. These statistics are very valuable to the various local police agencies, to criminologists, to sociologists, and to those interested in crime prevention and law enforcement throughout the nation. Quarterly bulletins are furnished to the

local police who are able to make comparisons and adjust their own organizations and activities in order to aid them in meeting the standards of performance required to adequately handle the crime problem.

Information regarding fingerprint-identification work of the Identification Division is furnished promptly to the arresting officers of a municipality, county, State, or Federal agency, thus making easier the police problem. The prosecutor using this information finds it advantageous in the trial of a case, and the Judge, when imposing sentence following conviction, finds the previous criminal record thus supplied by the F. B. I. to be an important factor in aiding him in determining the proper sentence.

The clearinghouse function of the Identification Division is further emphasized when it is observed that a police department, desiring the apprehension of a fugitive from justice, may communicate with the Federal Bureau of Investigation and on the fingerprint card of the fugitive can be placed a notation that the criminal is wanted by the local police department, and upon the apprehension of this criminal on any other charge in any other section of the country, when his fingerprints are received by the F. B. I., information can be promptly supplied as to the location of the fugitive. By this method each month approximately 700 fugitives are located for the benefit of local law-enforcement agencies. Such wanted notices are likewise published from time to time in a monthly bulletin issued by the Federal Bureau of Investigation, entitled "F. B. I. Law Enforcement Bulletin," so as to circulate generally among identification experts the fact that these fugitives from justice are desired for prosecution in various sections of the country. The Federal Bureau of Investigation will assist any interested law-enforcement organization in establishing a practice of forwarding fingerprints for criminal-identification purposes to the Bureau. The F. B. I. supplies, without cost, the fingerprint-identification cards on which the prints are submitted, instructions as to how to take fingerprints, franked envelopes in which these prints can be forwarded to Washington, and also will gladly assist any local agency in an effort to acquire equipment necessary to inaugurate the practice of taking fingerprints of criminals when desired. The Federal Bureau of Investigation, by personal contact through its special agents, carries on a program of education designed to aid police agencies even in the more remote sections of the country to take advantage of this cooperative endeavor.

As a further aid to local, State, and Federal law-enforcement agencies, the Federal Bureau of Investigation maintains a national stolen-property file, in which is recorded descriptive data concerning property obtained by fraud or stolen, and this clearinghouse activity

serves the purpose of permitting the identification of property recovered and its return through the proper police agency to the rightful owner.

The Federal Bureau of Investigation maintains field offices in 42 cities in the United States, out of which its more than 800 special agents operate in the performance of their investigative duties. This brings the special agents of the F. B. I. into very frequent contact with every local, county, and State law-enforcement agency in the Nation. This provides an opportunity for the exchange of ideas, for mutual helpfulness in the field of investigations of mutual interest, for developing a greater degree of cooperation and coordination between the Federal Bureau of Investigation and the local law-enforcement agencies. The location of the field offices advantageously throughout the country, the familiarity on the part of the local police and sheriffs with the location and addresses of the field offices of the Federal Bureau of Investigation, and the relationships which exist as the result of frequent contact result in a large number of violations of Federal laws being referred to the Federal Bureau of Investigation for proper handling when otherwise the cases might not receive appropriate attention due to the limited facilities and funds of the local departments.

In addition to the 42 field offices located in some of the larger cities, it has been found advantageous to assign individual agents to other larger cities where an office is not located, because of the necessity of almost full-time performance of work in such cities.

The total number of fingerprints on file in the Bureau as of June 1, 1940, is 12,972,135. The daily average of fingerprints received for search through the criminal fingerprint files during the fiscal year ending June 30, 1939, was 6,043, while the daily average during the month of May 1940 was 7,038. The daily average of personal identification fingerprints received during the fiscal year ending June 30, 1939, was 2,021. In May 1940 the daily average rose to 3,026. The total number of fugitives identified during the fiscal year ending June 30, 1939, was 7,993 and approximately 700 fugitives have been identified monthly during the first 11 months of the fiscal year 1940.

Local Planning Data and Information Available

Four thousand three hundred and sixty-seven police agencies throughout the country each month submit a report on offenses known to the police, and there is likewise submitted by these police agencies information as to the offenses cleared by arrest, together with other details such as the amount or value of the property stolen and the amount and value of the property recovered. These data, when received by the Federal

Bureau of Investigation, are classified and published in such a manner that there is reflected the extent, the trend, and the fluctuation of crime throughout the United States. The information obtained from the numerous fingerprint cards which are received is likewise reported so that a quarterly publication known as the "Uniform Crime Reports Bulletin" may be published by the Federal Bureau of Investigation, showing the seasonal trend, the distribution of crime on a population basis, a comparison with the volume of crime on an annual basis with previous years, the sex, the race, the age, and the recidivity of criminals.

An adjunct of the Fingerprint Identification Division is a single fingerprint file on approximately 14,000 major criminals so as to make their identification possible in the event only a single fingerprint has been left by the criminal at the scene of the crime.

There is a total collection of more than 13,000,000 fingerprint cards in the Fingerprint Identification Division of the Federal Bureau of Investigation. Each day an average of over 7,000 additional cards on arrested persons are received. Upon receipt of these cards each one bearing the fingerprints and descriptive information concerning an arrested person, the fingerprints are classified and a search is made to determine if the arrested person has a previous record. Over 59 percent of all such cards received are identified as the fingerprints of individuals who have a previous record in the files of the F. B. I.

There is likewise collected various information obtained from publications and other sources relating to law enforcement and its related problems in such a manner as to make the Federal Bureau of Investigation a national clearinghouse for information on law enforcement and crime problems.

There are distributed from time to time to the graduates of the F. B. I. National Police Academy and to various police agencies throughout the country, outlines, summaries, theses, and articles which will have a value as a source of information and as material to be used in courses of instruction.

Bibliographies

- A Bibliographical Manual for the Student of Criminology. Author, Thorsten Sellin and J. P. Shalloo. Publisher, University of Pennsylvania, Philadelphia, Pa., 1935. (A bibliography of bibliographies.)
- Bibliography of Scientific Crime Detection. American Journal of Police Science, issues of November and December 1931.
- Crime and Criminal Justice. United States Library of Congress, Division of Bibliographies, 1930. (Mimeographed, 84 titles.)
- List of References on Hoaxes, Homburg, Bluff, Buncombe, etc. United States Library of Congress, Division of Bibliographies.
- List of References on the Drug Habit and Traffic. United States Library of Congress, Division of Bibliographies, 1933. (Mimeographed, 35 pp.)
- A Guide to Material on Crime and Criminal Justice. Author, Augustus Frederick Kuhlman. Publisher, H. W. Wilson Company, New York, N. Y., 1929.
- Bibliographies of Crime and Criminal Justice. Author, Dorothy Campbell Culver. Publisher, H. W. Wilson Company, New York, N. Y., 1934.
- A Bibliography of Police Administration and Police Science. Author, Sarah Greer. Publisher, Institute of Public Administration, Columbia University, New York, N. Y., 1936.

Current Periodicals

- American Bar Association Journal. Publisher, American Bar Association, 1140 North Dearborn Street, Chicago, Ill.
- Police Journal (Quarterly Review). Publisher, Public Administration Service, 850 East 58th Street, Chicago, Ill.

Material Issued by the Federal Bureau of Investigation

- Bibliography of Crime and Kindred Subjects.
- F. B. I. Law Enforcement Bulletin (monthly publication).
- Federal Bureau of Investigation.
- Guide for Preparing Annual Police Reports.
- Handbook Containing Suggestions for the Preparation of Uniform Crime Reports.
- Recent Federal Crime Bills.
- Some Legal Aspects of Interstate Crime.
- Uniform Crime Reports.
- Teletype and Its Use in Law Enforcement.
- Thorough Preparedness and Successful Prosecutions.
- Personnel Selection and Training in the F. B. I.

The Bureau also issues 18 published technical reports on identification and 43 on laboratory subjects.

DEPARTMENT OF LABOR

BUREAU OF LABOR STATISTICS

Bureau of Labor Act, 1884.
Department of Labor Act, 1888.

Brief General Statement of Agency Functions

General Functions and Policies.—The Bureau of Labor Statistics is a research agency directed "to acquire and diffuse among the people of the United States useful information on subjects connected with labor, in the most general and comprehensive sense of the word, and especially upon its relation to capital, the hours of labor, the earnings of laboring men and women, and the means of promoting their material, social, intellectual, and moral prosperity." The Bureau is further directed "to collect, collate, and report at least once a year, or oftener if necessary, full and complete statistics of the conditions of labor and the products and distribution of the products of the same." The term, "labor" is interpreted in a broad sense to include white-collar and sometimes low-salaried professional workers whose interests tend to be identical with those of manual workers. Although it is not a policy-forming body and does not administer any labor laws, the Bureau furnishes factual data, relating to the condition of the working population, upon which the legislative and executive branches of the Federal, State, and local governments, employers, workers, and the public may and do base their plans for creating better economic and social conditions, particularly insofar as certain labor aspects are concerned.

It is the policy of the Bureau of Labor Statistics never to undertake studies that overlap with research already being done locally.

Specific Programs and Procedures.—Continuing research studies are made in a number of major fields including: (1) Employment, hours and wages; (2) occupational outlooks; (3) cost of living and retail and wholesale prices; (4) building permits; (5) industrial relations; (6) labor turn-over; and (7) labor legislation and court decisions. Reports on these subjects are published at frequent intervals. Employment and payroll data, statistics of prices, building permits issued for cities of 1,000 population and over, labor turn-over, and strike data are made available monthly. Annual wage studies are made relating to special classes of labor, covering the entrance wage rates for common labor and trade-union scales of wages and hours. Re-

The Department of Commerce and Labor Act, 1908.
The Department of Labor Act, 1913.

ports on cost of living are compiled quarterly. Comprehensive surveys of hours, hourly, weekly, and annual earnings, and other working conditions, including personnel and overtime policies in important industries such as cotton textiles and iron and steel, are usually made every second year. When there is a particular need for information similar wage surveys are made in the less important industries. Digests of both Federal and State laws and court decisions covering labor matters are issued as the legislation is enacted, and annual summaries are prepared.

These regular studies are supplemented by special fact-finding surveys covering various subjects. The choice of such surveys is modified to meet the rapidly changing emphasis and requirements in industrial life. Among the subjects recently investigated are migratory labor, employment resulting from P. W. A. construction, labor requirements in different kinds of construction, disbursements of low-income families, productivity of labor and effects of technological changes on labor, paid vacations, prison industries, self-help activities of the unemployed, and old-age homes.

Most of the Bureau's work of collection and analysis is handled in the main office at Washington. In large part the necessary information for reports is collected by means of questionnaires sent through the mails. A field staff is maintained, however, and to insure accuracy, agents are sent to plants and local bodies supplying data whenever detailed and highly technical reports are required. In some cases the questionnaire and personal-visit methods are combined, agents being sent out periodically to check with organizations which regularly supply figures, by mail, on forms.

Every effort is made to insure that sample data for the Bureau's studies shall be adequate and shall typify national conditions. It is seldom possible to make a complete survey of all establishments in an industry or of all units in any field but accuracy is sought by taking a sufficiently large sample, having due regard for geographic and other differences.

Cooperative services are maintained with certain city and State Governments for the collection of statistics used in certain of the Bureau's continuing reports. Sixteen cooperating agencies covering activities in as

many States collect and tabulate, in part, statistics of employment, payrolls and hours of work in manufacturing and non-manufacturing industries. These summary figures are supplied to and incorporated in the monthly reports issued by the Bureau. This arrangement has the twofold advantage of expediting the issuance of the monthly data and insuring that the resultant figures for different States are compiled on a uniform and comparable basis. Some States also co-operate with the Bureau in collecting statistics of labor turnover and union wages.

An important field of cooperation between municipal authorities and the Bureau of Labor Statistics is the furnishing of data on the number of buildings and the valuation of building permits for reports issued each month. These figures are currently supplied by the local building-inspection offices of over 2,000 of the largest cities in the United States. The Bureau bears the cost of the forms used and the mailing.

Activities Affecting and Assistance to Local Planning

Published reports of value to local planning bodies based on the findings of the Bureau of Labor Statistics, may be divided into two classes with respect to their pertinency to local planning problems; (1) Those studies showing the general level of employment, working time, earnings and purchasing power of labor; and (2) surveys covering particular kinds of activity in fields with which the local bodies are directly concerned.

1. Exemplifying data of general usefulness are the monthly reports showing employment, hours, and wages, industry by industry, and for manufacturing and nonmanufacturing by groups. These include sections showing the volume of employment and total payrolls in public employment by class of service.

The quarterly surveys of cost of living and monthly studies of retail and wholesale prices are guides in interpreting the statistical series already mentioned.

2. Investigations dealing with construction trends have a direct usefulness in land planning. Of these the most comprehensive series is that covering the number of buildings constructed and their permit valuation in over 2,000 of the largest cities. The figures on building permits are issued monthly and are broken down by cities of different sizes. Special city reports give greater detail than is possible in the regular monthly pamphlets.

Supplementing these data are a number of reports showing the proportion of each dollar spent which is used for labor and materials on different kinds of construction projects such as road and small-house building; relation of permit valuation to contract price and selling price; size of buildings in residential construc-

tion; and the characteristics and trends of construction projects financed wholly or partially from Federal funds.

Of the special survey materials, the migratory, prison labor, and self-help reports are of concern in local planning.

Although most of the statistical reports issued show summary results only, that is by industry, by the larger geographic areas, and by main or population groups, it is often possible for the Bureau to furnish a breakdown of the information for particular areas. Work of this kind is undertaken upon request, when the amount of work involved is not prohibitive and when there is no risk of disclosing the identity of reporting organizations which furnish reports on condition that they will be kept confidential. In addition, facts and figures dealing with many aspects of labor conditions are maintained in the files and may be obtained through consultation and correspondence.

The Bureau is always ready to consider the feasibility of extending the scope of its surveys to cover conditions that local agencies believe should be investigated and to advise and consult on matters of labor interest and methods of research.

Local Planning Data and Information Available

Continuing Reports

Monthly Labor Review—Monthly Journal. From this source the summary results of all investigations made by the Bureau of Labor Statistics may be obtained. When reports are more detailed than can be published in this journal and the information warrants it, they are published either in bulletin or pamphlet form. Although the *Monthly Labor Review* is available only on a subscription basis, many of the studies that appear in this periodical may be obtained regularly without charge as bulletins or pamphlets.

Employment and Pay Rolls—Monthly Pamphlet. Trend of employment and pay rolls. Monthly reports showing indexes of employment and pay rolls in various private industries as well as in Federal service and on construction projects financed in whole or in part by Federal funds. At the present time these reports cover approximately 135,000 establishments in private industry engaged in manufacturing (90 industries), coal mining, metalliferous mining, quarrying and nonmetallic mining, crude petroleum producing, public utilities, wholesale and retail trade, hotels, laundries, dyeing and cleaning, brokerage, insurance, and building construction. In addition, monthly percentage changes in employment and pay rolls are shown in releases, (1) by States, (2) by industrial groups, and (3) by metropolitan areas or cities of 100,000 population and over. In public employment the reports cover the various Federal services, construction projects of the P. W. A., U. S. H. A., B. F. C., regular Federal appropriations, Federal projects under the Works Program, projects operated by W. P. A., projects of the National Youth Administration, and the C. C. C. Monthly reports on average hourly earnings, average per capita weekly earnings, and average hours of work; includes practically all of the industries listed

above. These reports are made simultaneously with those on the trend of employment and payrolls, but may cover a smaller sample of establishments in the case of average hours and average hourly earnings, owing to the fact that some establishments which are able to report on general employment and payrolls do not keep a record of man-hours worked, a record essential to the derivation of average earnings and average hours worked.

Cost of Living—Quarterly Pamphlet. Quarterly indexes showing trend in the cost of goods purchased by families of wage earners and clerical workers, based on retail price surveys of food, coal, gas, and electricity (under retail prices) with additional price surveys of the other items important in family purchases, such as clothing, furnishings and equipment, and miscellaneous items. The Bureau expects, in the near future, to put the cost of living index on a monthly basis.

Retail Prices—Monthly Pamphlet. Monthly reports on retail prices of food and quarterly reports on retail prices of coal, gas, and electricity. At present, prices are gathered for 84 of the principal items of food and for domestic electricity rates in 51 large cities. Bituminous coal prices are secured for 47 cities, anthracite prices for 33 cities, and domestic gas rates for 50 cities. Annual compilations are made shortly after the close of each year. Quarterly reports are issued showing indexes of rents by types of dwellings for each of 33 cities.

Wholesale Prices—Monthly Pamphlet. Weekly and monthly reports on wholesale prices of individual items and index numbers for major groups of commodities. At present, prices are collected for approximately 5,000 separate items. A semi-annual review covering individual commodity price movements is issued in pamphlet form. Information is available daily covering spot market prices for 28 basic commodities.

Building construction—Monthly Pamphlet. Monthly reports are received from cities with a population of 1,000 or more, giving

data, by type of construction, on number of buildings, permit valuations, and number of families provided for in new construction. The data are tabulated for identical cities reporting in the previous month and in the same month of the preceding year. Data are analyzed and quarterly estimates made of the number of new family dwelling units provided in the entire urban area of the United States. These reports, showing the volume of new residential and nonresidential construction, additions, alterations, and repairs, and the number of dwelling units provided, are indicators of employment in building construction.

Special Reports

Prison Labor in 1936. Reprinted from *Monthly Labor Review* for August 1936, Serial No. R. 795.

Labor Mobility and Relief. Reprinted from *Monthly Labor Review* for January 1939, Serial No. R. 893.

Industrial Aspects of Labor Mobility. Reprinted from *Monthly Labor Review*, April 1939, Serial No. R. 917.

Self-help Activity of the Unemployed. Reprinted from *Monthly Labor Review* for July 1938, Serial No. R. 774.

Federal Aid to Self-help Cooperatives. Reprinted from *Monthly Labor Review* for January 1939, Serial No. R. 872.

Self-help Organizations in the United States, 1938. Reprinted from the *Monthly Labor Review* for December 1938, Serial No. R. 1048.

Housing of Dependent Aged. Reprinted from the *Monthly Labor Review* for August 1939, Serial No. R. 977.

Money Disbursements of Wage Earners and Clerical Workers in 49 Cities. Bulletin No. 638.

State, County, and Municipal Survey. Pamphlets by cities, showing government employment and pay rolls.

Building Permit Survey. Pamphlets by cities, showing number, kind, and value of structures for which permits have been issued in recent years.

CHILDREN'S BUREAU

Act of Congress of 1912 (37 Stat. 79).

Social Security Act of 1935 (49 Stat. 620).

Social Security Act as Amended, 1939 (Public, 379¹—76th Congress—Parts 1, 2, 3 of Title 4).

Fair Standards Act of 1938 (52 Stat. 1080).

Brief General Statement of Agency Functions

In accordance with the act of Congress of 1912 creating the Children's Bureau, the Bureau was directed "to investigate and report—upon all matters pertaining to the welfare of children and child life among all classes of our people"—including "infant mortality, the birth rate, orphanage, juvenile courts, desertion, dangerous occupations, accidents and diseases of children, employment, and legislation affecting children in the several States and Territories."

The Social Security Act in that section providing for grants to the States placed on the Children's Bureau the responsibility for maternal and child-health services, services for crippled children, and child-welfare

services. The Fair Labor Standards Act directed the Bureau to administer those provisions of the act relating to oppressive child labor.

In effectuating its authorized functions, the Bureau conducts research, informational, and advisory service; administers Federal grants to the States for maternal and child-welfare services; and administers the Federal law regulating the employment of children in establishments producing goods for interstate commerce.

Activities Affecting and Assistance to Local Planning

Immediate responsibility for the well-being of children lies with their families and home communities. The product of the Children's Bureau research and co-

operative activities with national and State agencies is made available for the use of parents and local communities in planning for the care, training, and protection of children.

The Bureau deals directly with local communities in providing information on various phases of child care and protection, in the conduct of surveys or research projects in selected communities, in the collection and analysis of community health and welfare statistics in selected urban areas, and by giving advisory services to officials and others studying community conditions affecting children or planning community services for children.

Through its consultation service to State health and welfare agencies receiving and administering Federal grants for maternal and child-welfare services the Bureau shares in advisory services to local communities in the development of maternal and child-health services, services for crippled children, and child-welfare services. Such studies are made as will promote efficient administration of these three programs. As yet, funds have been available for only a very limited study program.

The programs and procedures of the Children's Bureau are concerned principally with three main service groups: (1) Maternal and child health work; (2) Social services for children; and (3) Children and employment.

Maternal and Child Health Work

The Division of Research in Child Development has charge of studies relating to the growth and health of the child from the prenatal period through adolescence and of studies relating to maternal and child health, morbidity, and mortality. These studies may relate to a specific group in one area, as in the case of a 2-year study of the physical fitness of some 1,000 school children in New Haven, Conn., or to a widespread community child-health problem, such as a study of infant mortality in Memphis or of maternal, infant, and pre-school health services in the District of Columbia.

Through the Maternal and Child Health Division the Children's Bureau distributes to the State health agencies annual appropriations under the provision of the Social Security Act, as amended in 1939, authorizing \$5,820,000 for grants to States, for the extension and improvement of services for the promotion of the health of mothers and children, especially those in rural areas and in areas suffering from severe economic distress. Regional medical consultants, pediatricians, public-health nurses, and a nutritionist are made available for consultation and advisory service to State and local officials on the development of these services. The annual plans for maternal and child health services

submitted by the State health agencies in requesting the Federal grants usually provide, insofar as funds are available, for aid to local health agencies, particularly those in rural areas, for the employment of physicians and public-health nurses to carry on maternal and child health programs.

The Crippled Children's Division of the Bureau distributes to the State crippled children's agencies, which in the majority of States are the State health and welfare agency, the \$3,870,000 authorized for annual distribution by the amended Social Security Act. These funds enable the States to extend and improve services for locating crippled children and those whose condition may lead to crippling, and providing them with needed services. Regional medical, public-health nursing and medical-social consultants on the staff of the Children's Bureau give advisory and consultant service to the State agencies on the development of their programs for crippled children.

Social Services for Children

The Social Service Division conducts studies on subjects related to social services that promote the well-being of all children or are provided to protect and care for dependent, neglected, and handicapped children. The Division is especially concerned with community provision for such services; with the care of children in institutions and foster homes; with special problems of dependency, neglect, illegitimate birth, mental deficiency, and physical handicaps affecting the social welfare of children; community provision for recreation; the organization of child-welfare services in State and county departments of public welfare; and legislation in these fields.

In this social-service field, the Bureau has conducted studies on the institutional care of dependent or handicapped children, foster-home care for children, adoption procedures and safeguards, services for unmarried mothers, and the administration of child-welfare services in selected States and local areas. The Division is frequently called on for advisory service on proposed child-welfare legislation.

The Delinquency Division, an outgrowth of the work of the Social Service Division, is concerned with the study of the causes, treatment, and prevention of juvenile delinquency. It is concerned with methods of preventing and treating behavior problems through community services, juvenile courts, and probation, and institutions for delinquent children, and with legislation in this field. The Division is conducting in St. Paul, Minn., in cooperation with local agencies, a 3-year community project involving experimentation with methods and an evaluation of methods in the treatment and prevention of delinquency in a city

neighborhood. The Division is studying recent trends in the development of juvenile court services and their relation to other community child-welfare programs.

Through the Child Welfare Division, the Children's Bureau administers the \$1,510,000 authorized under the amended Social Security Act as grants to the States for establishing, extending, and strengthening—especially in predominantly rural areas—services for the protection and care of homeless, dependent, and neglected children, and children in danger of becoming delinquent. The State plans for child-welfare services are made jointly by the Children's Bureau and the State welfare agencies and are administered in the States by the State welfare agencies. Federal funds are used by the States to pay part of the cost of the district, county, or other local child-welfare services and to develop community child-welfare organizations, especially in areas predominantly rural and other areas of special need. The Children's Bureau has on its staff regional child-welfare consultants who give advisory service to the State welfare agencies in the development of their programs for child-welfare services.

Children and Employment

The Industrial Division studies problems of the employment of children and young people with relation to the extent, type, and conditions of child labor in factories and stores and in service industries and street trades, occupational hazards in such employment, laws affecting the employment of minors and their administration, methods of vocational guidance and junior placement, and vocational opportunities for minors. Current studies include child labor in nonmanufacturing industries in selected cities, placement services for juniors, administration of employment-certificate laws, and hazards to young workers in the operation of motor vehicles.

The responsibilities of the Children's Bureau under the Fair Labor Standards Act of 1938 are administered by the Industrial Division. The child-labor provisions of this act, which apply to establishments producing goods for shipment in interstate commerce, authorize the Chief of the Children's Bureau to make investigations and inspections with regard to the employment of minors in these establishments, to bring action to enjoin acts or practices involving oppressive child labor, and to administer all other provisions of the act relating to oppressive child labor.

Directly, the Children's Bureau gives service and assistance in the field of local planning as follows:

1. The Bureau reports on research studies of community conditions and programs in the various child-welfare fields. These reports serve as background material for the study of child-welfare problems in

other communities and for the planning of community services for children.

2. Statistics gathered or compiled by the Bureau on maternal and infant mortality, maternal and child-health activities, services for crippled children, health, and welfare activities in urban areas, juvenile-court activities, and employment certificates summarized on a national basis and in some cases by States and cities, provide a background for comparison of vital statistics and for measuring similar activities or the lack of them in local areas. To a limited extent, on request, special analysis of these statistics can be prepared for local purposes.

3. The Children's Bureau gives information and advice on the planning of studies of community child-welfare conditions and programs. For the most part such advice is given by correspondence. To a limited extent, members of the staff are available for visits to local areas for consultation services in planning child-welfare programs.

4. The regional consultants in the Maternal and Child Health, Crippled Children's, Child Welfare, and Industrial Divisions of the Children's Bureau are available to the State administrative agencies for consultation services on local activities. At the request of the State health, welfare, or labor agencies, the Children's Bureau consultants from time to time visit local areas to discuss local problems relating to children and ways of dealing with them.

5. The Children's Bureau monthly news summary, *The Child*, includes articles describing local maternal and child-health activities, protective services for children, and, from time to time, the recommendations of national conferences relating to services for children.

6. At intervals, the Bureau undertakes in a selected community a study of child-welfare problems and services or of some special phase of child welfare, or a study of one or more phases of child welfare may be undertaken in several communities. The number of such studies which can be undertaken is limited by the size of the Bureau's research staff. Subjects and localities are selected on the basis of the significance of each study in its application to other local areas.

Local Planning Data and Information Available

Field visits to the States, progress reports, and other reports from the State agencies bring to the Children's Bureau extensive information on the need for and the conduct of maternal, child-health, and child-welfare services—both State and local.

In connection with its program of child-welfare services, established in accordance with title V, part 3, of the Social Security Act, the Bureau receives monthly

reports from the States on services to children in rural areas provided by this program.

The Bureau assembles quarterly and annual reports from the State health agencies on maternal and child-health services, primarily those rendered under the supervision of State health agencies—not including urban services in all States. Quarterly and annual reports from the State crippled children's agencies are assembled, showing the crippled children on State registers and the services rendered these children.

A series of studies on the institutional care of juvenile delinquents is being carried on in cooperation with the Children's Bureau Advisory Committee on Training Schools for Socially Maladjusted Children.

The Bureau collects and publishes current statistics showing the trend and volume of health and welfare services in selected urban areas of 50,000 or more population (42 areas in July 1940), covering the activities of public and private agencies in the fields of family welfare and general dependency, care of children, leisure-time activities, hospital care, and other services.

Current statistics of children's cases involving delinquency as disposed of by juvenile courts are collected and published by the Children's Bureau. These statistics include reports from 8 States covering all juvenile courts in these States, reports from 35 courts in 21 other States, and a report from the District of Columbia Juvenile Court.

Monthly reports on the issuance of employment certificates to children 14 and 15 years of age and minors 16 and 17 years of age are received by the Children's Bureau from 43 States, the District of Columbia, and Hawaii; and from 46 cities in 5 other States. These records show the numbers of children going to work for the first time in occupations for which work-permits are required.

Publications and Bibliographies

A Selected List of Publications of the Children's Bureau.

Bibliographies which may be obtained on request from the Children's Bureau include the following subjects:

- Institutional Care of Dependent Children.
- Illegitimacy.
- Juvenile Delinquency.
- Child Labor and Related Problems.
- Vocational Guidance.

Publications in the field of maternal and child-health related to community child welfare include:

- Better Care for Mother and Child. 1939. 20 pp.
- Facts About Child Health. 1940. 12 pp.
- The Child-Health Conference. 1940 (in press).
- Causal Factors in Infant Mortality. Pub. 142, 1925. 245 pp.
- Maternal Mortality in 16 States. Pub. 223, 1934. 215 pp.

- Infant Mortality in Memphis. Pub. 233, 1936. 108 pp.
- Federal and State Cooperation in Maternal and Child-Welfare Services Under the Social Security Act, Pub. 254, 1938. 111 pp.

Publications in the field of social service for children related to community planning for children, include:

- Community Social Services for Children. Folder 7. 11 pp.
- The Public Welfare Program in the District of Columbia. Pub. 240, 1938. 82 pp.
- Development of a Leisure-Time Program in Small Cities and Towns, Pub. 241, 1937. 13 pp.
- Facts about Juvenile Delinquency; its prevention and treatment, Pub. 215, 1935. 44 pp.
- Handbook for Recreation Leaders, Pub. 231, 1936. 121 pp.
- Home Play and Play Equipment for the Preschool Child, Pub. 238, 1937. 20 pp.
- The Community Welfare Picture as Reflected in Health and Welfare Statistics in 29 Urban Areas, 1933. 1939. 69 pp.
- Proceedings of the Conference on State Child-Welfare Services, Washington, D. C., April 4-16, 1938. Pub. 255, 1939. 155 pp.
- Children in a Democracy; general report adopted by The White House Conference on Children in A Democracy, January 19, 1940. 1940. 86 pp.
- Preliminary Statements of the White House Conference on Children in a Democracy, 1940. (In press.)
- Children in the Courts, 1937; juvenile-court statistics, year ended December 31, 1937, and Federal juvenile offenders, year ended June 30, 1937. Pub. 250, 1937. 88 pp.
- Directory of State, County, and Municipal Training Schools Caring for Delinquent Children in the United States. Pub. 264, 1940. (In press.)

Publications in the field of child labor related to community planning include:

- State Child-Labor Standards; a summary of State laws affecting the employment and compulsory school attendance of minors. 1938. 54 pp.
- Employment Certificate Statistics, 1937. Social Statistics Supplement to "The Child," June 1938, 3 pp.
- Children Engaged in Street Trades, Detroit, Michigan, 1939. Mimeographed. 38 pp.
- Young Workers and Their Jobs in 1936; a survey in six States. Pub. 249 (in press).
- Junior Placement; a survey of junior-placement offices in public-employment centers and public-school systems of the United States. Pub. 253, 1940. 184 pp.

Monthly publication:

"The Child," monthly news summary. 10¢ per copy. \$1 per year.

Charts, maps, and exhibit material:

Charts based on Census Bureau figures are issued by the Bureau relating to births, maternal mortality, infant mortality and the cause of such mortality, and charts based on studies of the Children's Bureau and other data relating to mothers and children.

Special exhibit materials prepared for national conferences and posters emphasizing important child-welfare objectives are available for local use when applicable.

WOMEN'S BUREAU

Act of Congress (Public, 259, 66th Congress, H. R. 13229), Approved June 5, 1920.

Brief General Statement of Agency Functions

The Women's Bureau is primarily a research agency and functions chiefly in collecting and presenting material and in furnishing consultative service on various angles of the problems connected with the gainful employment of women.

Its objective, as defined by the act, is to "formulate standards and policies which shall promote the welfare of wage-earning women, improve their working conditions, increase their efficiency, and advance their opportunities for profitable employment."

Activities Affecting and Assistance to Local Planning

The survey and research work of the Women's Bureau falls into four categories:

1. Investigations for Federal and State agencies into the wages, hours of work, general working conditions, safety, and other economic factors affecting employed women.
2. Broad economic, statistical, and legal surveys representative of the women population of the United States and its possessions.
3. Investigations on subjects pertaining to the employment of women for particular localities which request such work and have need of the results obtained therefrom.

Ways in which the Bureau affects or can aid local planning are:

1. The research and investigative results available constitute statistical planning background available to local planning bodies.
2. Particular studies or surveys of the Bureau serve as examples of methods and techniques of conducting certain types of surveys.
3. Consultation to local planning bodies. The Bureau is frequently called upon to furnish advice and consultation on subjects connected with the employment of women. Such aid is available to any authentic agency requesting it, insofar as the resources of the Bureau permit.

4. The Bureau makes surveys of particular problems connected with the employment of women at the request of Federal, State, and local agencies, insofar as its resources permit. Such surveys of wages, employment, conditions in particular industries, occupational opportunities, and related subjects have been made for Federal agencies; for State bodies, such as the State labor departments, and officials; for State governors; and for private organizations of citizens interested in the welfare of wage-earning women.

Local Planning Data and Information Available

The Women's Bureau has a large body of information on the various phases of woman employment. In addition to the published technical reports, the Bureau has certain material in charted or pictorial form for distribution, both still and sound moving pictures on phases of woman employment, and other popular types of informational material.

The labor laws for women are compiled periodically for every State. The general legal status of women has also been summarized for each State. Periodic reports are made on conditions in various States as to women's wages and employment, industrial accidents, and occupational diseases affecting women.

The Women's Bureau of the U. S. Department of Labor.
What it is; what it does; what it publishes. Folder 12
Revised Jan. 1938.

The Folder includes a list of the publications of the Women's Bureau; divided according to Recommended Standards; Hours, Wages, and Working Conditions; Lost Time and Labor Turnover; Occupations and Opportunities; Family Status and Home Responsibilities; Health and Safety; Legislation; Employment Fluctuation and Unemployment; Changes in Hours and Methods of Production; Industrial Home Work; Bibliographies; and Exhibits.

The Woman Worker. Periodical publication, issued once every two months.

This contains information concerning the condition of women from many viewpoints, frequently dealing with their status in the various States.

DEPARTMENT OF THE INTERIOR

BUREAU OF BIOLOGICAL SURVEY¹

Appropriation Act for the Department of Agriculture and for the Farm Credit Administration for the fiscal year ending 1940. (Public, No. 159—76th Congress—1st Session.)

Migratory Bird Treaty Act of July 3, 1918 (40 Stat. 755), as amended June 15, 1935 (49 Stat. 381).

Migratory Bird Hunting Stamp Act of March 16, 1934 (48 Stat. 457), as amended June 15, 1935 (49 Stat. 379).

Federal Aid to Wildlife Restoration Act of Sept. 2, 1937 (50 Stat. 917).

The Upper Mississippi River Wildlife and Fish Refuge Act of June 7, 1924 (43 Stat. 650), as amended March 4, 1925 (43 Stat. 1354), May 12, 1928 (45 Stat. 502), and June 18, 1934 (48 Stat. 1015).

Bear River Migratory Bird Refuge Act of April 23, 1928 (45 Stat. 448).

Cheyenne Bottoms Migratory Bird Refuge Act of June 12, 1930 (46 Stat. 579).

Wildlife Conservation Coordination Act of March 10, 1934 (48 Stat. 401).

Alaska Game Law of Jan. 13, 1925 (43 Stat. 739), as amended Jan. 4, 1931 (46 Stat. 1111), and June 25, 1938 (52 Stat. 1169).

Lacey Act of May 25, 1900 (31 Stat. 187), sections 1 and 5, sections 2, 3, and 4 codified as sections 241-244 of the Penal Code of 1909 (35 Stat. 1137), as amended June 15, 1935 (49 Stat. 380), and June 19, 1939 (Pub. No. 131, 76th Congress—1st Session).

Section 84 of the Act of March 4, 1909 (35 Stat. 1088), as amended April 15, 1924 (43 Stat. 98).

Act of March 2, 1931 (46 Stat. 1468).

Brief General Statement of

Agency Functions

The Bureau of Biological Survey is an agency of the Federal Government concerned with the welfare of all forms of the country's resources in vertebrate wildlife, excepting fishes and marine animals, which are under the jurisdiction of the Bureau of Fisheries of the Department of the Interior. This wildlife service, also a unit of the Department of the Interior, was termed the Bureau of Biological Survey in recognition of a form of its scientific work essential to its other activities—the making of surveys of the major biological regions of the continent. The Survey's work is based on the results of investigations in practically all parts of the United States and adjacent countries.

The more important phases of this work embrace specialized research in the relationship, migration, and distribution of wildlife, and the economic status of the various species; experiments in game and fur propagation; wildlife disease investigations; control of injurious animals; the acquisition and maintenance of bird refuges and big-game preserves; and the administration of wildlife-conservation laws.

To coordinate field activities of the Bureau, the United States and Alaska have been divided into 10 regions, each so bounded as to facilitate administration and to aid in cooperation with other governmental agencies.

The functions of the Biological Survey involve research, management, and cooperation, and are presented below topically under the several divisions.

1. *Division of Wildlife Research.*—The Division of Wildlife Research continues the early work of the Survey in the study of the migration and food habits of birds; and in faunal geography, the life histories, relationships, and classification of birds and mammals and other land vertebrates. Five categories of work are conducted: (1) Wildlife surveys, (2) food-habits research, (3) bird distribution and migration studies, (4) fur-animal research, and (5) wildlife-disease investigations.

2. *Division of Wildlife Refuges.*—The Division of Wildlife Refuges is charged with the general administration of the national wildlife refuges under the jurisdiction of the Survey, involving the selection, planning, development, maintenance, patrol, and public use of lands primarily suited for wildlife; and the evaluation of the results of the program.

3. *Division of Predator and Rodent Control.*—The Division of Predator and Rodent Control conducts cooperative work throughout the United States and Alaska for the control of predatory animals and injurious rodents that interfere with agriculture, horti-

¹Effective as of June 30, 1940, the Bureau of Fisheries and the Bureau of the Biological Survey will be consolidated into a new organization, to be known as the Fish and Wildlife Service, and will remain in the Department of the Interior. This action has its basis in the President's Reorganization Plan No. III. The functions and work of the Bureau of Biological Survey, as they are to be consolidated in the new agency, will remain substantially the same as at present.

culture, forestry, stock raising, and game protection; and that serve to spread rabies, sylvatic plague, and other diseases of wild animals.

4. *Division of Game Management.*—The Division of Game Management is responsible for the administration of Federal statutes for the protection and conservation of wildlife.—The Migratory Bird Treaty Act of 1918, the Migratory Bird Conservation Act of 1929, the Migratory Bird Hunting Stamp Act of 1934, the Lacey Act of 1900, and through the Alaska Game Commission, the Alaska Game Law of 1925.

5. *Division of Federal Aid in Wildlife Restoration.*—The Division of Federal Aid in Wildlife Restoration correlates and supervises all activities concerned with the Federal Aid to Wildlife Restoration Act of 1937. This act provides the incentive and machinery for much closer cooperation with State game departments, which are encouraged to develop wildlife-restoration projects and are reimbursed from Federal funds for not to exceed 75 percent of the cost of work satisfactorily performed on approved projects, the remaining 25 percent being paid by the States.

Activities Affecting and Assistance to Local Planning

Aid to other Federal agencies, States and other organizations in local policy and program planning has long been a major function of the Biological Survey. The types of service available fall into two categories: (1) Cooperation with joint financial responsibility, and (2) cooperation in program and policy planning. Cooperation in which Federal and local funds are used is restricted (1) to a definite number of programs approved by congressional legislation, and (2) to advice, information, and service extended to enable agencies or organizations to determine and effectuate policies and programs. The latter, having no congressional restrictions and involving a much larger number of organizations and individuals, serves a broader field in local planning.

(1) Cooperation With Joint Financial Responsibility

Cooperative Research Units.—In cooperation with colleges and State game departments, a series of research units are maintained in Alabama, Iowa, Maine, Missouri, Ohio, Oregon, Pennsylvania, Texas, Utah, and Virginia. Each unit conducts a program balanced between (1) research and investigations in the life history, relationships, and management of wildlife; (2) the establishment of trial or experimental demonstration areas, comprising object lessons of wildlife-management practices; and (3) educational activities, embracing training for wildlife-management work and the preparation of information for the public.

These units resulted from the needs of colleges and land-use agencies for some organization, located within the State, to study and plan for the conservation of the wildlife resources in land-use planning programs and management.

Control.—Animals that interfere with agriculture, stock raising, forestry, and wild game; damage food-stuffs; and menace health are controlled in cooperation with States, counties, municipalities, game and fish departments, and livestock and farmers' organizations. The district agents of the Biological Survey throughout the United States are available to render help in formulating programs in cooperation with State or local planning boards on any subject pertaining to the control of predatory animals or injurious rodents. Cooperative predator and rodent-control agreements have been entered into between the Biological Survey and other Federal agencies, a number of States, and local associations.

Federal Aid in Wildlife Restoration.—The sole function of the Division of Federal Aid in Wildlife Restoration is to assist the States, through their game departments, in restoring wildlife. Types of projects that may be approved are (1) research to solve wildlife administrative problems; (2) the development of Federal, State, or private lands for wildlife; and (3) the acquisition of lands for wildlife restoration.

Aided by cooperative funds, State game departments may plan and execute programs for the conservation and restoration of wildlife, either on a State-wide or a purely local basis. The State game departments are the agencies designated by legislation to cooperate with the Survey, but assistance may be extended to other planning agencies within the States if the game departments elect to do so.

Cooperation in Program and Policy Planning.—The nature of program and policy planning assistance is threefold, embracing (1) investigation and research, (2) action, and (3) advice.

Investigation and Research.—In instances where a local problem is considered to have a national or regional significance, the Biological Survey will detail workers to study the problem in the field or in the laboratory. The nature and subject matter of wildlife problems being studied by the research personnel of the Biological Survey changes from time to time to meet current needs. Although many of the problems have a national significance, the findings of others meet the needs of local planners. Investigations under way at the present time include studies relating to five subject headings: (1) Wildlife surveys, (2) food-habit research, (3) bird distribution and migration studies, (4) fur-animal research, and (5) wildlife-disease investigations.

Local planning agencies may obtain information and consultation with regard to any of the above-mentioned

subjects by contacting the nearest regional office of the Biological Survey.

Action.—Another form of service at the disposal of local planning units is concerned with cooperative action.

Refuge Development.—The selection, acquisition, development, and management of wildlife areas under the jurisdiction of the Biological Survey has proved an ideal program and one adaptable to the conservation and adjusted use of water and land. This extensive program, embracing 280 refuges with over 18,500,000 acres, constitutes a demonstration of the administration of planned land use.

(a) *Types Needed, Purpose, and Size.*—In all, 139 refuges, embracing 1,613,632 acres, have been established primarily for migratory waterfowl. For other migratory, upland, and other birds; mammals; and other forms of wildlife, 129 areas, totaling 5,356,852 acres, have been established, as have 12 big-game preserves and ranges containing 6,559,876 acres.

(b) *Selection and Acquisition.*—In the selection of migratory waterfowl refuges, studies and surveys bearing upon the question are reviewed prior to acquisition. Refuge areas may be acquired by purchase, easement, gift, the withdrawal of public domain by Executive order, and cooperative agreements with or transfer from other Federal agencies. In the establishment of refuges, the Survey has met with local planning groups. Information on refuge areas too small for satisfactory administration under the Federal program, information from the 1934 Nation-wide survey of waterfowl areas proposed by the State game departments and interested sportsmen, and advice on refuge establishment by local groups are supplied upon request. Bulletins on refuge needs and development are also available.

(c) *Wildlife Use.*—By 1934 migratory waterfowl were so drastically reduced in numbers that a concerted demand was made for Federal action in providing a Nation-wide rehabilitation program. The Red Rocks Refuge in Montana was acquired to preserve the almost extinct trumpeter swan; many waterfowl areas were obtained; and several big-game preserves were established to provide sanctuary for native species.

Several land-utilization projects, transferred from the Soil Conservation Survey to the Biological Survey or to State game departments, with the Survey as custodial agent, are being managed as demonstrations of the use of submarginal lands for practical wildlife management. The application of the management principles developed is important because wildlife values are attainable on land economically unsuited to other uses.

(d) *Cooperative Utilization.*—Whenever, in the management of refuges the grazing facilities or such products as hay and timber are found to be surplus to the needs of wildlife, these can be disposed of by sale or by use under permit. Grain for emergency feeding and food patches are provided on suitable refuges through share-crop agreements.

Suitable areas for fishing and other recreational uses may be designated by the Secretary of the Interior. Agreements have been made for live-trapping surplus game on several game refuges for use by State game departments in stocking depleted areas.

The establishment and development of certain refuge areas have been possible by cooperation with other Federal bureaus having reservoirs, ranges, islands, and rocks suitable for wildlife maintenance.

(e) *Planning Service.*—The Wildlife Refuge Division is represented on the Water Resources Committee of the National Resources Planning Board, and several of the regional directors

are departmental representatives on local planning committees in the field. Refuge staffs in certain localities also have been active in work with county planning groups.

Law Enforcement.—Frequently State game departments solicit advice and assistance from the Survey relative to matters pertaining to policy determination, administration, and procedure in game law enforcement. The trained personnel of the Survey are available to aid the States by acting as instructors in State game-warden schools and in assisting the game departments in formulating law-enforcement programs. Game-management agents, deputy game-management agents, and deputy game wardens also cooperate extensively with State game departments in the enforcement of their game laws.

Each year an inventory of the waterfowl of the country is made to aid in determining suitable open seasons on migratory waterfowl. The inventories are directed by the Biological Survey, assisted by other agencies, organizations, and individuals.

Investigations are conducted to obtain information regarding the birds protected under various treaties and acts of Congress.

Advice.—An important phase of the assistance the Biological Survey is able to render local planning agencies on matters pertaining to wildlife planning, conservation, restoration, and control is that of technical advice. This assistance is sought by and given to Federal and State agencies, national, regional, and local planning boards and commissions, conservation associations and societies, unorganized groups, and individual citizens.

(2) Cooperation With Federal Agencies

To establish guiding principles and harmonious working relationships in the administration of wildlife resources on publicly owned lands, agreements, contracts, and memoranda exist between the Biological Survey and land-use and research agencies of the Department of the Interior and the Department of Agriculture.

Agencies within the Department of Agriculture.—(a) The Bureau of Biological Survey is one of the parties to a memorandum of understanding between the Bureau of Agricultural Economics, the Agricultural Adjustment Administration, the Soil Conservation Service, the Farm Security Administration, the Forest Service, the Federal Crop Insurance Corporation, the Bureau of Public Roads (recently transferred from the Department of Agriculture to the Federal Works Administration), the Bureau of Entomology and Plant Quarantine, the Bureau of Chemistry and Soils, the Extension Service, the Marketing Agreements Division of the A. A. A., the Federal Surplus Commodities Corporation, the Commodity Exchange Administration, and the Sugar Division, in which is defined the relationship existing between the Bureau of Agricultural Economics and the operating agencies of the Department of Agriculture.

This agreement gives the Biological Survey opportunity to obtain the values for wildlife conservation from programs not

under its administrative control by providing for the integration of planning for wildlife conservation with general land-use planning and program building in the fields of erosion control, flood control, rehabilitation, price stability, production adjustment, land-utilization adjustment, highway and other transportation facilities, security of farm tenure, marketing, adjustments in rural institutions and organizations, improvements in the living conditions of rural people, and soil and forest conservation.

(b) *Soil Conservation Service*.—The Biological Survey is recognized as responsible for conducting wildlife surveys, technical guidance in wildlife conservation, and controlling economically injurious birds and mammals on public and private lands where the Soil Conservation Service has work projects.

(c) *Farm Security Administration (formerly Resettlement Administration)*.—The Farm Security Administration receives assistance from the Survey in the control of rodents and predatory animals on lands under its jurisdiction.

(d) *Forest Service*.—Under an agreement between the Forest Service and the Survey, the latter is recognized as responsible for the wildlife research necessary to lay the foundation for wildlife management in the national forests, and for providing technical guidance in the control of injurious mammals.

(e) *Extension Service*.—To stress the importance of developing wildlife resources as a permanent part of agriculture, the Extension Service looks to the Biological Survey for information on wildlife conservation and fur production in connection with farming operations. The Federal Extension Service cooperates with State extension services in disseminating the information to the farmers.

(f) *Bureau of Chemistry and Engineering*.—Experts of the Bureau of Chemistry and Engineering and of the Survey are engaged in technical work on furs, in which the physical properties contributing to the production of furs of superior quality are investigated.

(g) *Drainage Activities of the Department of Agriculture*.—In order to guard against the initiation of projects that might result in unnecessarily serious injury to important wildlife habitat or in its ultimate destruction, all bureaus or agencies of the Department sponsoring or engaged in drainage operations, including work of this nature prosecuted by the aid of the Civilian Conservation Corps, submit plans for initiation or extension of drainage projects to the Biological Survey for review and consideration before planned work is undertaken.

(A) The Department of Agriculture, the Tennessee Valley Authority, and the agricultural colleges of the States of Alabama, Georgia, Kentucky, Mississippi, North Carolina, Tennessee, and Virginia, with the Biological Survey, plan for the development of a broad program of readjustment and rehabilitation of rural areas, of which wildlife management is a part.

Agencies Within the Department of the Interior.—(a) *Bureau of Reclamation*.—The Survey acts as the technical agency that furnishes information on lands and guidance in controlling injurious rodents on areas administered by the Bureau. Another agreement is concerned with the establishment and administration of wildlife reservations and refuges on areas of the Bureau of Reclamation.

(b) *Grazing Service*.—The Survey assists the Grazing Service in controlling rodents and predators harmful to stock in grazing districts. In the matter of public domain, an agreement exists whereby the Survey cooperates in the protection and administration of game ranges or wildlife refuges established in conjunction with the organization of grazing districts under the Taylor Grazing Act.

(c) *Office of Indian Affairs*.—Assistance is given to the Office of Indian Affairs in the control of rodents and predators on Indian reservations.

Land Utilization Projects.—Certain areas heretofore acquired and developed in the Land Utilization Program under title III of the Bankhead-Jones Act have been made available to State game departments under lease or agreement between the States and the Department of Agriculture, with the Biological Survey serving as custodial agency.

Lands Controlled or Administered by the Department of Agriculture or by the Department of the Interior.—On lands under the control of or being administered by any agency of the Department of Agriculture or of the Department of the Interior, the Biological Survey conducts or supervises the conduct of fundamental wildlife research to determine principles upon which plans for wildlife conservation, management, and control may be based, and acts in an advisory capacity in carrying out such plans and principles.

On lands under the control or administration of any other agency of either Department, responsibility and authority for correlation and integration of wildlife management with recreation, timber production, grazing, farming, or other uses rests with the agency administering the lands.

Other Agencies.—(a) *Lands of the War Department and the Coast Guard*.—The War Department and the Coast Guard frequently request information on technical matters pertaining to wildlife from the Biological Survey for the development and administration of lands and water controlled by these agencies. Wherever wildlife conservation can be coordinated with the primary purpose of the area, this is done. Projects in this classification include flood control and navigation, proving grounds, military reservations, and life-saving stations.

(b) *Lands and Waters Administered by the Tennessee Valley Authority*.—The Tennessee Valley Authority recognizes the Biological Survey as the Federal agency concerned with the protection of the migratory waterfowl of the Nation. By mutual agreement, sections of the T. V. A. reservoirs are dedicated as migratory waterfowl refuges and the wildlife on them is administered by the Biological Survey.

(c) *Projects of the Work Projects Administration*.—All projects affecting water levels, drainage, erosion control, irrigation, water control, or mosquito control financed with W. P. A. funds, are submitted to the Biological Survey for technical advice and clearance. Federal and State projects are included in this procedure.

County Agricultural Land Use Planning Committees.—Representatives of the Survey have been assigned to serve in an advisory capacity on all State land use planning committees, which are being organized to plan for the development of an integrated agricultural land-use, conservation, adjustment, and rehabilitation program in a selected county (or area) in each State.

National and Regional Land Use, Water Resources, and Pollution Control Committees.—The Survey is

recognized as the Federal wildlife service concerned with the conservation of national and regional land-use, water-resource, and pollution-control agencies; and wildlife interests are represented on committees dealing with this type of planning by Survey personnel.

Cooperation with State Agencies and Local Organizations.—Reference has been made to various types of assistance given to State agencies, local organizations, and citizens. In addition to those mentioned, the Biological Survey is constantly being solicited for advice and information on a wide range of subjects incidental to local planning problems by State game departments,

research stations, sportsmen's groups, conservation clubs, and others.

Local Planning Data and Information Available

Bibliography.—Leaflet BS-4, listing the available publications of the Bureau of Biological Survey; revised, April 1939.

The Biological Survey is able to make available to responsible planning agencies information on definite areas and regions. Such information is given by consultation, in special reports, and by surveys.

BUREAU OF FISHERIES^{*}

Joint Resolution of Congress on February 9, 1871 (S. L. Vol. 16, pp. 593-594).

Order of the Secretary of the Department of Commerce and Labor of February 15, 1905.

Order of the Secretary of the Department of Commerce and Labor of December 28, 1908.

Additional Acts allocating specific administrative and regulatory functions.

General Introductory Statement

The first Commissioner of Fish and Fisheries was appointed in 1871. The commission thus created as an independent agency was incorporated in the Department of Commerce and Labor in 1903, in the Department of Commerce in 1913, and finally on July 1, 1939, in the Department of the Interior.

The Bureau of Fisheries is essentially a research organization. Its findings, presented to the States in the form of technical reports and direct recommendations, become effective only by enactment of State legislation. Such recommendations are based upon adequate and scientific studies and have considerable influence in shaping conservation policies in the States which insure the perpetuation of aquatic resources.

Federal jurisdiction over fisheries is restricted to Alaska and other territories or possessions of the United States. Within the territorial waters of the United States, the individual States retain complete jurisdiction over the fisheries.

Brief General Statement of Agency Functions

The functions of the Bureau include biological investigation; the collection of statistics of the commercial fisheries; the comprehensive study of all phases

of fishery methods and utilization; the administration and enforcement of the laws governing the salmon fisheries of Alaska; the administration of the Alaska fur-seal service, partial control of the sponge fisheries off the coast of Florida; the protection of walrus and sea lions in Alaska; the rescue of fishes from flooded areas of the Mississippi, administrative control over fishery matters in the upper Mississippi wildlife and game refuge; complete regulation of the fisheries in Alaska; enforcement of the black bass law; administration of the act authorizing the formation of cooperative associations of fish producers, and the power to issue regulations jointly with the Secretary of the Treasury governing the whale industry under the international whaling treaty.

The Bureau of Fisheries consists of five divisions: the Division of Scientific Inquiry, Law Enforcement Division, the Division of Fish Culture, the Division of Fishery Industries, and the Alaska Division. The functions of the Division of Scientific Inquiry and the Division of Fishery Industries are indicated in the following section. The Division of Fish Culture is primarily concerned with the breeding, raising, and distribution and production of fishes. It operates some 110 hatcheries. The Law Enforcement Division is principally concerned with the enforcement of the black bass and whaling laws, and the Alaska Division with the fisheries and fur seals in Alaska. In connection with the latter, the Alaska Division is concerned with the education, housing, health, and livelihood of the natives living on the islands of St. Paul and St. George.

^{*} Effective as of June 30, 1940, the Bureau of Biological Survey and the Bureau of Fisheries will be consolidated into a new organization, to be known as the Fish and Wildlife Service, and will remain in the Department of the Interior. This action has its basis in the President's Reorganization Plan No. III. The functions and the work of the Bureau of Fisheries, as they are to be consolidated in the new agency, will remain substantially as they are at present.

Activities Affecting and Assistance to Local Planning

Division of Scientific Inquiry.—The biological investigations conducted by this division deal with the fundamental problem of maintaining the supply of fish. Scientific research provides information on the condition of the various stocks of fish and aids in foretelling periods of abundance and scarcity; indicates how the supply may be maintained at productive levels by efficient management, and supplies a factual basis for measures to protect fish supplies from depletion. In addition to the commercial investigations conducted on the Atlantic, Gulf, and Pacific coasts and in the Great Lakes, the biological investigations include aquicultural studies concerned primarily with the culture and management of fresh water fishes and shellfish.

The relations of the division are primarily with State Fish and Game Departments and with other Federal agencies. Through this division, the Bureau of Fisheries conducts research to determine what remedial measures may be taken to improve the condition of depleted fisheries, or how a fishery may be prosecuted most efficiently and economically, with least detriment to the supply. These findings, often with recommendations as to appropriate legislation, are submitted to the States for such administrative and legislative action as may be deemed advisable.

Opportunities for direct cooperation with local governmental units are extremely limited. According to the usual procedure, individuals, towns, or counties wishing advice on fishery matters approach their own Fish and Game Commission, which in turn refers the problem to the Bureau of Fisheries if assistance is required. The amount of assistance that the Bureau is prepared to render in such cases is limited by available funds and also by the fact that long-term fishery investigations of far-reaching importance in fishery conservation occupy the major share of the investigators' time.

The following instances are examples of direct cooperation between the Bureau of Fisheries and local agencies. A study of certain fisheries problems in Suffolk County, Long Island, was begun on May 15. The study is being conducted by that county in cooperation with the Bureau and is financed by an appropriation by the county. The project was sponsored by the Salt Water Committee of the Board of Supervisors of Suffolk County and actively supported by commercial and sport fishermen of Long Island. This action sets a precedent, for it is the first time that a county has contributed funds for such a study of marine fisheries in cooperation with the Bureau. The study will be concerned chiefly with determining the best and most economical means of utilizing the supply of important sport and commercial species.

During 1937, a brief investigation was made to determine the conditions responsible for the disappearance of oysters in Shinnecock Bay, Long Island. Recommendations for the restoration of the oyster beds were offered at the conclusion of the survey.

For a number of years, the aquicultural staff of the division has maintained a disease service for the purpose of assisting State, Federal, and private fish culturists in the diagnosis of fish diseases. Several hundred shipments are received each year for diagnosis. A recently established section on hydraulics has rendered important consulting services on such fish-protective work as screens and ladders, although the staff is engaged primarily in the design and installation of fish screens on Federal irrigation projects in the Pacific Northwest.

To some extent, the services of the biochemists and physiologists who are engaged in a study of the problems of stream pollution are available to local agencies. The staff advises State officials, various industrial concerns, and numerous private individuals on matters of pollution and water conditions.

During recent years there has been a constantly growing number of requests from State fish and game commissions, fish and game clubs, and other organizations for technical services and advice in connection with stream surveys, stream improvement, pollution surveys, examination of the quality of water in hatcheries or rearing ponds, discovery of the causes of mortality of fish, and the like. The Bureau recognizes that satisfying these requests is a valuable function, but it is unable to apply funds appropriated for investigation to routine activities which, while locally useful, contribute little to the development of a sound body of knowledge of the principles of fishery conservation. At the present time, requests for services of this sort greatly exceed the Bureau's facilities to care for them without sacrificing the major program of scientific investigation. It is recommended, therefore, that requests for technical aid in the solution of fisheries problems be made to the State conservation authorities, with which the Bureau will continue to cooperate to the fullest extent possible.

Division of Fishery Industries.—This division is concerned with the activities and welfare of the commercial fisheries and fishery industries and the persons employed therein, the fish canning and preserving industries, and the trade in fishery products. Its functions include a fishery market news service, the collection of fishery statistics, the administration of the Fishery Cooperative Act, economic and marketing studies, the study of the efficiency of fishing craft and gear, studies to develop fisheries for unutilized species, the study of the preservation of fishery commodities, the development of commercial uses for little-known

species and new uses for well-known species, aid in promoting the consumption of aquatic foods through studies of and dissemination of facts concerning the nutritive value of such foods, and other technical and economic studies.

Many of the activities of the Division of Fishery Industries, both through its publications and its current personnel and laboratory facilities, have frequent relation to local planning. Its services usually are made available to agencies interested in this type of work through State or municipal contacts with the field personnel or the Washington office. Aid in the form of personnel and facilities is offered for research, surveys, demonstrations, consulting, and planning. Through its publications detailed data often are available for use in solving local problems.

Covering an extensive range of services to the commercial fisheries the activities of the Division of Fishery Industries have a rather wide application in local planning. The following examples indicate the manner in which use is made of the division's resources in aiding local activities. The State of Rhode Island was given technological advice, including the inspection of sites, for a fish meal plant at a suitable point in that State. A report of the production of sea foods in Rhode Island waters was prepared for the State college for use in requesting an appropriation for a laboratory for marine investigations in Narragansett Bay. Literature and information were prepared for developing fisheries educational work in public schools in Kentucky and Maryland.

Technical assistance was given in the establishment of a fishery cooperative in North Carolina. A report for use as a guide in organizing, incorporating, and operating a fishery cooperative was issued. Investigations of the wholesale trade in fresh and frozen fish and related marketing considerations have been made in a number of cities. Recently a survey of methods used in the retail marketing of fresh and frozen fishery commodities was completed for 50 cities in the eastern portion of the country. Similar studies have been made for individual species which are of particular interest to certain localities.

Administrative and technical assistance was provided Florida in making a survey of the consumption of fish in that State. Maine was aided in developing a statistical system to record the catch and value of fishery products taken in its waters. Tennessee and the T. V. A. were aided in formulating a policy with regard to fisheries in the Tennessee Valley. Considerable assistance has been given the W. P. A. in Eastport, Maine, in making an economic study of the fisheries in that area.

Statistical information on local fisheries is continuously furnished State and municipal authorities for use in preparing conservation laws, requesting appropriate

tions, and determining the importance and value of the fishing industry to the area. For example, the North Carolina State Planning Board was furnished information concerning the number of fishermen and fishing craft engaged in the industry in that State and the volume and value of the catch of fish and of manufactured fishery products. Similarly, statistical data were supplied Maryland for use in surveying its aquatic resources and issuing a publication entitled "The Fisheries of Maryland." Field personnel in the State of Washington render technical assistance to and serve on the State planning council.

Division of Fish Culture.—No functions of the Division of Fish Culture are specifically directed toward assisting local planning. In a few isolated instances the division has cooperated in planning development of fish cultural projects administered by local governmental agencies.

These projects were initiated for demonstration purposes to indicate the possibilities of local governmental units furthering recreational angling. Comparable assistance would be rendered in case of similar requests but the Bureau would be unable to continue to supervise such a project after its initial establishment.

The division undertakes to prepare stocking plans for waters under the control of local governmental units and to provide from its hatcheries the fish requirements indicated by such a program. Communities such as Springfield, Illinois, and Danville, Virginia, have availed themselves of such surveys. It is to be stressed that such functions are purely incidental to the primary functions of the division and are undertaken only as a result of individual specific requests and negotiations. The ability to comply with further solicitations for such aid will depend upon conditions and circumstances prevailing in each case.

The technical planning resources of the division are offered to the various State conservation departments in the solution of any fish cultural or stocking problems which come under the jurisdiction of such agencies.

Local Planning Data and Information Available

Statistical Bulletins

Fisheries of the New England States.
 Fisheries of the Middle Atlantic States.
 Fisheries of the Chesapeake Bay States.
 Fisheries of the South Atlantic and Gulf States.
 Fisheries of the Pacific Coast States.
 Fisheries of the Lake States.
 Fisheries of the Mississippi River and Tributaries.
 Fisheries of Alaska.
 Manufactured Fishery Products of the United States and Alaska.
 Fishery Products Frozen and Cold-Storage Holdings of Frozen and Cured Fishery Products in the United States and Alaska.
 Production of Fresh and Frozen Packaged Fish in the United States.

Canned Fishery Products and By-products of the United States and Alaska.

Landings by Fishing Vessels at the Three Principal New England Ports.

Fishery Products Landed by United States Vessels at Seattle, Wash.

Fishery Market News Service Reports and Summaries

Daily Fishery Market News Reports are issued at New York, Boston, Chicago, Seattle, Jacksonville, and New Orleans.

Monthly Fishery Market News Summaries are issued at Boston, Chicago, and New York.

Documents, Investigational Reports, and Circulars

Fishery Industries of the United States.
Fisheries of Puerto Rico.

Fisheries of the Virgin Islands.

Organizing and Operating Fishery Cooperative Marketing Associations.

Trade in Fresh and Frozen Fishery Products and Related Marketing. Considerations in Chicago, Ill. Also for Minneapolis, St. Paul, San Francisco Bay Area, St. Louis, Jacksonville, New York City, Boston, and Seattle.

Publications Supplying a Factual Background for Planning Activities

Detection and measurement of stream pollution, by M. M. Ellis, 1936. 72 p. 22 illus. B. of F. Bulletin 22. 20¢.

Instructions for conducting stream and lake surveys, by H. S. Davis. 57 p. 11 illus. Fishery Circular No. 26. 10¢.

A plan for the development of the Hawaiian fisheries, by Frank T. Bell and Elmer Higgins, 1939. 27 p. 8 illus. B. of F. Investigational Report No. 42. 10¢.

Stocking interior waters of the United States, by M. C. James. 1933. 18 p. 7 illus. Fishery Circular No. 26. 10¢.

In cases where local surveys of fishery problems have been made, data are available through the Washington office.

BUREAU OF MINES

Act of May 16, 1910.

Amendments of February 25, 1913.

General Introductory Statement

The Bureau of Mines is primarily a research agency conducting work of concern to the mining industry. It was established to aid in the economic development, conservation, and use of the national mineral resources and to improve the health conditions and increase safety among the employees of the mining and metallurgical industries. The Bureau's activities are organized in four branches, dealing respectively with technology, economics and statistics, health and safety, and administration.

Brief General Statement of Functions

General Functions and Policies.—The general functions of the Bureau are (1) to conduct inquiries and scientific and technologic investigations concerning mining, and the preparation, treatment, and utilization of mineral substances with a view to improving health conditions and increasing safety, efficiency, economic development, and the conserving of resources through the prevention of waste in the mining, quarrying, metallurgical, and other mineral industries; (2) to inquire into the economic conditions affecting these industries; (3) to investigate explosives and peat; (4) on behalf of the Government to investigate the mineral fuels and unfinished mineral products belonging to, or for the use of, the United States with a view to their most efficient mining, preparation, treatment, and use; and (5) to disseminate information concerning these subjects.

The policy of the Bureau is to work in close contact with the mineral industries in finding solutions for existing problems and new ones which arise from time to time as increasing depletion of resources presents new obstacles to their recovery and to the beneficiation of the output from remaining mineral deposits; and in providing a greater incentive to the economical use of these resources. In the promotion of health and safety among employees of the mining and metallurgical industries, the hazards have been studied, instruction courses have been prepared and disseminated, and the cooperation of employers and employees effectively enlisted in preventive programs.

Specific Programs and Procedures.—The specific programs and procedures of the Bureau of Mines relate to technological and economic problems of general interest to the mining and metallurgical industries or to a major branch of one of them. The technologic work of the Bureau includes investigation of mining, milling, and metallurgical methods and practices, particularly as they affect the cost of production. Results are disseminated in published reports throughout the mining industry generally, enabling individual units to keep abreast of technical advances in the mining field. The objective is to promote the use of more efficient practices in mines and plants, and thus to aid in the conservation of mineral resources by preventing waste in mining operations and by making possible the exploitation of lower-grade ores. Specifically, the work of the mining engineers includes investigations, in mine and laboratory, of mining methods and technical problems.

The economic and statistical work of the Bureau supplies industry and Government with information relative to the conservation of resources, and the statistical trends and economic problems in the mineral industries. It conducts economic and statistical surveys of mineral resources, capacity, production, distribution, consumption, stocks, prices, accidents and their prevention, and the recovery and re-use of scrap metals; it surveys the relation of domestic mineral production to international trade, with particular attention to national dependence on imports; it compiles information on occurrences and production, and on the commercial and political control of world minerals; it reviews current conditions in the mineral industries and their consuming markets, and collects, compiles, and distributes statistical data relative thereto; and studies and reports on the long- and short-term consumption trends in relation to the economic coordination of supply and demand. These activities supply the data essential to the planning and successful conduct of industrial operations in the production and beneficiation of minerals, as well as in their marketing and use. The economists of the Bureau regularly cooperate with other Federal agencies, and with State and private research agencies, in matters relating to the conservation and utilization of the national mineral resources. The principal statistical task of the Bureau of Mines is the annual collection, analysis and publication of data showing the production, value, distribution, stocks, and other economic information pertaining to the output of each active mine in the country. The results are published in the *Minerals Yearbook* of the Bureau of Mines, which is the only source of complete original data covering the economic phases of the mineral industry on an annual basis. The annual statistics published by the Bureau trace the underlying economic changes in the mineral industries and provide a background for the more current reports containing weekly, monthly, or quarterly data.

In the Economics and Statistics Branch studies relating to mineral technology and output per man are being made in cooperation with the National Research Project of the Works Progress Administration. These broad economic investigations have been in progress for 3 years, and results have been published periodically. Broadly, the studies are concerned with production and unemployment in the mineral industries, emphasizing commodity investigations and studies of the type and rates of technological change; when completed, this research also will constitute valuable background for planning in the field of mineral industry. A partial list of the publications of the W. P. A. National Research Project in cooperation with the Bureau of Mines is attached hereto.

In the exercise of its functions relating to health and safety, the Bureau of Mines investigates the causes of

mine accidents and seeks means of preventing them; it studies health hazards in the mineral industries and recommends remedial measures; the members of its field staff conduct instruction courses in first aid and accident prevention; and it maintains mine rescue stations in the field.

Research in the technological problems of mining and metallurgy are conducted in field stations centrally located with regard to the districts served, and economic and statistical studies are conducted both in Washington and in the strategically located field offices.

Activities Affecting and Assistance to Local Planning

Although the services of the Bureau have seldom been called upon in connection with local planning, in any case where minerals are involved the knowledge and experience of the Bureau's staff might contribute effectively to a thorough analysis of the problems to be solved. The Bureau could provide consultant and technical advice to planning agencies concerned with making studies of the same general character as those conducted by the Bureau.

An inventory of mineral resources is conducted through field examination of selected districts in which there is special interest or where the potentialities for mineral exploitation are not well known but are believed to be of some importance. These surveys have involved some 400 areas varying widely in size, and they are for the most part concerned with the gold-mining industry. The surveys indicate the nature and extent of those mineral resources which affect or are affected by the productive mining industry. All-inclusive investigations of potential mineral resources are made by the Geological Survey.

Of interest to local planning in many instances is the subject of water pollution. In such cases the studies that have been made of stream pollution from coal-mine drainage and from waste products of by-product coke ovens might prove useful. With adequate funds similar studies could be applied to specific localities involved in local-planning programs.

Local Planning Data and Information Available

List of publications of the Bureau of Mines.

Supplements of list of publications of Bureau of Mines.

Partial list of the publications of the W. P. A. National Research Project in cooperation with the Bureau of Mines:

Technology and the Mineral Resources. (Out of print.)

Mineral Technology and Output per Man Studies: Grade of Ore. (Out of print.)

Employment and Related Statistics of Mines and Quarries, 1885: Coal.

Technology, Employment, and Output per Man in Phosphate-Rock Mining, 1880-1887.

Changes in Technology and Labor Requirements in the Crushed-Stone Industry.

Small-Scale Placer Mines as a Source of Gold, Employment, and Livelihood in 1885. (Out of print.)

Small-Scale Placer Mines as a Source of Employment During the Depression.

Mechanization, Employment, and Output per Man in Bituminous-Coal Mining.

Technology, Employment, and Output per Man in Petroleum and Natural-Gas Production.

Technology, Employment, and Output per Man in Iron-Ore Production.

Technology, Employment, and Output per Man in Copper Production.

Technology, Employment, and Output per Man in Lead and Zinc Production.

Technology, Employment, and Output per Man in Gypsum Production.

BUREAU OF RECLAMATION

Reclamation Act of June 17, 1902, and Amendments and Supplementary Acts.

Warren Act of February 21, 1911.

Brief General Statement of Functions

The Bureau of Reclamation is primarily a construction agency, concerned with investigating, reporting on, initially approving, constructing, and supervising irrigation and reclamation projects.

The Reclamation Service was established in 1902. It was provided that monies received from the sale and disposal of public lands in Arizona, California, Colorado, Idaho, Kansas, Montana, Nebraska, Nevada, New Mexico, North Dakota, Oklahoma, Oregon, South Dakota, Utah, Washington, and Wyoming be set aside and appropriated as the Reclamation Fund for the survey and examination of possible irrigation projects and their construction and maintenance in the arid or semiarid land of the 16 States designated. Amendment and supplementary acts have provided additional funds from various sources. Texas was added to the original group of States in 1906. In 1911 provision was made for the sale of surplus water from Federal irrigation projects for use on private lands.

Activities Affecting and Assistance to Local Planning

Activities of the Bureau of Reclamation fall into three categories:

1. *Actual Projects:* Dams, reservoirs, canals, etc. Reclamation project investigations include the following:

(a) Preliminary reconnaissance surveys to determine the character and extent of the problems;

(b) Horizontal and vertical control surveys over areas to be covered by succeeding detailed investigations;

(c) Topographical surveys of reservoir and dam sites, canal and tunnel locations, and of lands feasible for irrigation;

(d) Geological examinations of dam and reservoir sites and of proposed tunnel and canal structure locations by test pits, diamond drilling, and other explorations;

(e) Location or alignment surveys of canals and laterals;

(f) Land classification, economic and irrigable area surveys to determine the extent and quality of the lands and their repayment ability;

(g) Drainage investigations by test wells and other means to determine present and probable future ground water elevations;

(h) Silt surveys of rivers and reservoirs to determine the probable rate of silting of the proposed reservoirs;

(i) Stream measurements and establishment of gaging stations to determine run-off;

(j) Assembly of information regarding existing water rights, past use of water, and crop production;

(k) Study of the water supply available for irrigation, power, and other uses, for the determination of reservoir, tunnel, pumping plant, and canal capacities, and the power development and flood control possibilities;

(l) Preliminary designs of dams and structures;

(m) Preparation of general maps showing irrigated (if any) and irrigable lands and also showing features proposed for construction;

(n) Preliminary estimates of quantities and costs; and

(o) General report covering investigations.

Upon completion of field work, the general report covering the investigation is prepared. Copies are furnished to the Congressional delegation of the State in which the project is located, to State and county officials and to local interested parties. No project can be undertaken for construction until the Secretary of the Interior shall have found the project feasible and it has been approved by the President. A contract for repayment of construction costs is entered into between the Government and a water users' association or irrigation district, organized under State laws, and composed of the water users on the project. Construction work is carried on as funds are made available by Congress and other lending agencies. Upon comple-

tion of the project it is turned over to the water users' Association or irrigation district for operation and maintenance, the Bureau retaining possession until the construction cost is fully repaid, whereupon a part or all of the project works may become the property of the community. The Bureau maintains a supervisory control over the project until the entire construction cost is repaid. On some projects certain works, such as dams, reservoirs, and power plants, are reserved to the United States for operation and maintenance.

A project can be proposed locally or reviewed and initiated by the Bureau as needed and desirable. Once this review and study has shown the desirability of the development, the cooperation of the community is obtained and machinery is set in motion for a complete survey and the approval of the project. Public lands, withdrawn under the reclamation laws, are administered by the Bureau until they are homesteaded, at which time they become the property of the individual homesteaders. Excess power from projects is available to cities, towns, and utilities.

2. *Project Areas*.—(a) *New Lands*.—In those project areas composed of new lands the Bureau has the authority to comprehensively plan the complete area prior to that time at which the lands are turned over to the homesteaders. The Grand Coulee area is an example of the utilization of this authority in that a consultant planner has been appointed to direct planning studies of this area which will include such planning considerations as the type and size of farm, location of roads and towns, their most effective design, location of community schools and hospitals, etc. The area affected in this instance is approximately 1,200,000 acres.

(b) *Developed Lands*.—When the lands concerned are not new lands, but are already privately owned and partially developed, the Bureau is limited to advising the locality with respect to those planning considerations which will tie in with and render more effective the work of the Bureau of Reclamation.

The Bureau has worked out a broad plan outline of proposed future development of those areas of the country most in need of irrigation and reclamation work. Eight thousand six hundred square miles are included in those projects which have been completed, are still under supervision of the Bureau, or are at present under construction and development.

3. *Construction Towns at Project Sites*.—In the case of construction towns, initially built to provide for the project workers but occasionally the basis for a smaller permanent remaining town, the Bureau has the authority to plan and supervise the design and development of these towns. Boulder City is an example. When towns are built by the contractor constructing the

project, the Bureau of Reclamation approves plans for these towns and retains supervision over them.

Aid.—The activities of the Bureau are defined by law. Direct aid to local planning has been evident in cooperation and work with the State and Regional Planning Boards and the National Resources Committee. When requested, personnel is assigned to work with these Boards. The Warren Act authorizes cooperation with irrigation districts, water users' associations, corporations, entrymen, or water users for the construction or use of such reservoirs, canals, or ditches as may be advantageously used for impounding, delivering, and carrying water for irrigation purposes.

Extent of Activities.—The Bureau of Reclamation is engaged in a major construction program on 83 projects in 13 States. Since 1902 the Bureau has built 89 storage and 67 diversion dams. There are 12 dams under construction and 24 authorized for construction. The storage reservoirs have a total capacity of 65,139,656 acre-feet. There have been built to date 20,000 miles of canals and drainage ditches and a multitude of canal structures, 24 power plants, 2,300 miles of roads, and 4,500 miles of transmission lines. More than 3,000,000 acres, which were desert a few years ago, are now being successfully farmed because of this construction. These irrigated lands support on farms and in project towns nearly 900,000 persons, who have built for themselves 863 schools and 1,076 churches, and who are served by banks with deposits aggregating about \$200,000,000. In 16 States where projects are now being operated, project lands are assessed for taxation at over \$200,000,000, the assessed value generally representing about half the actual value.

In 1938 crops produced on Federal reclamation projects had a value of \$118,700,000. The present construction program involves works to irrigate an additional 2,500,000 acres of carefully selected arid land, and to provide homes and opportunities for an additional 750,000 to 800,000 persons. About \$800,000,000 has been expended since 1932, but these new projects have not as yet begun production. As much more will be needed to complete the work now under way. All of these expenditures are reimbursable. About \$250,000,000 has been expended for projects now operating. Collections from water users made by the Bureau total to date more than \$115,000,000 of which about \$50,000,000 has been construction repayments.

Data and Information Available

Statistical and research material, reports, maps, etc., are available in the various offices of the Bureau to local planning agencies. This material comprises the following:

- (a) Reports of project investigations;

- (b) Water supply studies;
- (c) Topographic and land classification maps;
- (d) Geological studies;
- (e) Plans and specifications covering construction of dams and various irrigation structures, machinery, and materials;

- (f) Irrigation guide for farmers;
- (g) Technical memoranda;
- (h) Hydraulic and excavation tables;
- (i) Measurement of irrigation waters;
- (j) Concrete manual; and
- (k) Motion picture films.

The Operation and Maintenance Division of the Bureau gives advice to project water users and farmer's organizations on irrigation practice, weed eradication and other subjects relating to agricultural problems.

1. Partial list of publications distributed free on request. Requests should be made to the Bureau of Reclamation.

A. Pamphlets, reports, and other data concerning Federal reclamation:

1. Projects—Boulder Dam project:

Construction of Boulder Dam (reprinted from Dams and Control Works) 1938.

Selected bibliography of articles, Boulder and Grand Coulee Dams.

Central Valley project:

Review of Shasta Dam Plans (reprinted from Western Construction News) May 1933.

Grand Coulee Dam-Columbia Basin project:

Hearings and report, House Committee on Irrigation, H. R. 7448, May and June 1932.

Soil and Economic Conditions, 1928.

2. General reclamation:

Dams on Federal Reclamation Projects, May 1938.

Economic Problems of Reclamation, 1929.

Engineering Articles. A list of Engineering Articles No. 8, with Index. Partial list of Articles in Technical and other Periodicals on the Bureau of Reclamation; 1934.

Farmer's Irrigation Guide, May 1939.

Federal Reclamation Projects of the Bureau of Reclamation (temporarily out of print), 1935.

Federal Reclamation in a Nutshell, 1934.

Important Dams in the United States, October 1, 1933.

National Irrigation Policy.—Its Development and Significance (S. Doc. No. 36, 76th Cong., 1st sess.), February 1939.

Reclamation fulfills Its Mission (reprint from the Reclamation Era), July 1938.

Repayment of the Construction Costs of Federal and Indian Reclamation Projects (H. Doc. No. 673, 75th Cong., 2nd sess.), May 1933.

Report of an Economic Survey of Certain Federal and Private Irrigation Projects, 1929.

Report on Federal Reclamation to the Secretary of the Interior, December 1, 1934.

B. Illustrated booklets and folders on:

- 1. Belle Fourche project, South Dakota.
- 2. Boulder Dam, Arizona-Nevada.
- 3. Central Valley project, California.
- 4. Grand Coulee Dam-Columbia Basin project, Washington.
- 5. Klamath project, Tule Lake Division, Oregon-California.

- 6. Lower Yellowstone project, Montana-North Dakota.
- 7. Orland project, California.
- 8. Owyhee project, Oregon-Idaho.
- 9. Rio Grande Federal Reclamation project, New Mexico.
- 10. Shoshone project, Willwood Division, Wyoming.
- 11. Vale project, Oregon.
- 12. Yuma Federal Reclamation project, Arizona-California.

C. General information circulars concerning projects under construction:

- 1. All-American Canal project, California-Arizona.
- 2. Boise project, Payette Division, Idaho.
- 3. Central Valley project, California.
- 4. Colorado-Big Thompson project, Colorado.
- 5. Colorado River project, Texas.
- 6. Gila project, Arizona.
- 7. Grand Coulee Dam-Columbia Basin project. Special memorandum to prospective settlers in Columbia Basin areas.
- 8. Kendrick project, Wyoming.
- 9. Provo River project, Utah.
- 10. Rio Grande project, Caballo Dam and Elephant Butte Power Development, New Mexico.
- 11. Salt River project, Arizona.
- 12. Shoshone project, Heart Mt. Division, Wyoming.
- 13. Tucuman project, New Mexico.
- 14. Upper Snake River storage, Idaho.
- 15. Yakima project, Rosa Division, Washington.

D. Mimeographed statements descriptive of the following projects:

- 1. Belle Fourche project, South Dakota.
- 2. Bitter Root project, Montana.
- 3. Boise project, Idaho.
- 4. Grand Valley project, Colorado.
- 5. Huntley project, Montana.
- 6. King Hill project.
- 7. Klamath project, Oregon-California.
- 8. Milk River project, Montana.
- 9. Newlands project, Nevada.
- 10. North Platte project, Nebraska-Wyoming.
- 11. Orland project, California.
- 12. Parker Dam, California-Arizona.
- 13. Shoshone project, Wyoming.
- 14. Strawberry Valley project, Utah.
- 15. Sun River project, Montana.
- 16. Uncompahgre project, Colorado.
- 17. Yuma project, Arizona-California.

E. Motion picture films: The Department of the Interior, through its Division of Motion Pictures, upon request, distributes films of the various bureaus of the Department, including the Bureau of Reclamation, on condition that they will be returned promptly and in good condition and that the borrower will pay the express charges both ways.

Bureau of Reclamation films available for distribution are:

	Length in feet	
	27 mm.	35 mm.
Boulder Dam (construction from start to finish).....	1,912	4,781
Grand Coulee Dam (Columbia Basin project).....	712	1,780
Sound:		
Boulder Dam (construction from start to finish).....	1,300	3,261
Reclamation in the arid West.....	391	978
Reclamation and the U. S. C. O.	1,108	2,758

F. Slides: Lantern slides on various reclamation subjects are available for general distribution by the Bureau of Reclamation. The borrower will pay the express charges. A list of these slides is available.

II. Partial list of publications. May be purchased from Bureau of Reclamation.

A. Handbooks and manuals: *Boulder Canyon Project Final Reports*.—A series of bulletins now being prepared for publication to record the history of the Boulder Canyon project, the results of technical studies and experimental investigations, and the more unusual features of design and construction. Appropriate announcements will be made in engineering magazines as the bulletins become available for distribution. Four have already been published and are now available.

Dams and Control Works.—A description of representative storage and diversion dams and high-pressure reservoir outlet works constructed by the Bureau of Reclamation. Second edition, February 1938. Price \$1, paper cover, and \$1.50, cloth cover.

Federal Reclamation Laws Annotated.—A chronological compilation of the public statutes of the United States relating to

the Federal Irrigation of arid lands, with notes of decisions of the courts, etc. 700 pages. Price \$1.25, paper; \$1.50 cloth. 1938 accumulative supplement, 25 cents.

Measurement of Irrigation Water.—Fourth edition, 1935; paper; 48 pages. Price 50 cents. Foreign postage 3 cents additional.

B. Periodicals: *The Reclamation Era* (monthly magazine), official publication of the Bureau of Reclamation, designed primarily for the benefit and use of water users on Federal projects and of the staff of the Bureau. It is useful to contractors who wish to follow the work of the Bureau, and to others who are interested in the plans and policies of Federal Reclamation. Price, \$1 a year. Foreign subscription, \$1.38.

C. Maps and drawings: Maps and drawings of project areas are sold by the Bureau of Reclamation at estimated cost. A list of these maps and drawings is available.

D. Photographs: The Bureau of Reclamation maintains a file of official negatives showing construction, completed works, crops, homes, etc., operation, and settlement conditions, comprising about 40,000 views. Copies of official photographs are sold at estimated cost.

GENERAL LAND OFFICE

Ordinance of 1785.

Act of August 7, 1789 (1 Stat. 49).

Act of September 2, 1789 (1 Stat. 65).

Act of May 18, 1796 (1 Stat. 464).

Act of April 25, 1812 (2 Stat. 716).

Act of July 4, 1836 (5 Stat. 107).

Act of March 3, 1849.

More than 5,000 acts affect the organization and activities of the General Land Office.

General Introductory Statement

In the past, the General Land Office has not been essentially a planning agency. Originally it functioned merely as the agency for transferring the public domain lands from public to private ownership. At the time of its establishment, the general belief was that practically all of the public lands ultimately would be placed in private ownership, where they would find their highest economic use. With the increasing realization that substantial areas of land must remain in public ownership, however, and with the numerous reservations of public land which followed this realization, land management functions have been vested in the General Land Office, and its planning functions steadily are becoming more important.

Brief General Statement of Agency Functions

Activities of the General Land Office antedate the adoption of the Constitution of the United States. They began with the Ordinance of 1785. The duties of the Commissioner of the General Land Office are defined by law as follows:

The Commissioner of the General Land Office shall perform, under the direction of the Secretary of the Interior, all executive duties appertaining to the surveys and sale of public lands of the United States, or otherwise respecting such lands, and also such as relates to private claims of lands and the issuing of patents for all grants of lands under the authority of the Government.

While survey of the public lands still is an important function of the General Land Office, sale has become a minor function, since most of the public lands are reserved for various public purposes, and where used by individuals, are leased rather than sold. The General Land Office administers, or assists in administering, the many public land laws, including the Mineral Leasing Act, the Homestead Acts, certain sections of the Taylor Grazing Act, the Oregon and California Railroad Revested Lands Act, and the Five-Acre Tract Act; keeps a record of all disposal of the public lands, and maintains a forest fire protection force for public lands in Alaska.

Activities Affecting and Assistance to Local Planning

1. The Oregon and California Revested Lands Administration

The principal local planning activity which is under way at the present time in the General Land Office is carried on by the Oregon and California Revested Lands Administration, which administers the lands in western Oregon once granted to the Oregon and California Railroad Co. and the Coos Bay Wagon Road, title to which is now revested in the United States, under the acts of June 9, 1916, and February 26, 1919. The act of August 28, 1937, provides for the conservation of land, water, forest, and forage resources of approximately 2,800,000 acres of these lands. Under this act

the lands are to be managed on a permanent basis with provision for the prudent utilization of their resources for the purposes to which they are best adapted and for the realization of the highest current income consistent with the permanent value of the land. Steps are being taken to conserve the natural resources of these areas and timber is logged in accordance with principles of sustained yield management.

The current activity of the Oregon and California Revested Lands Administration of greatest value to local planning is the land classification work. This includes determination of the timber-producing capacity of the lands, subdivision of the lands into sustained yield forest units, classification of the lands with respect to their relative suitability for agriculture, forests, stream-flow protection, recreation or other uses, and determination of the lands which may be leased for grazing without interfering with timber production.

In classifying the Oregon and California and Coos Bay revested lands, a detailed cruise and a field examination are made of each sectional subdivision to determine the physical and economic facts, such as forest types, timber volume, logging conditions, topographic features, climatic conditions, soil conditions, adaptability of the various soils to specialized crops, grazing capacity, water supply, agricultural development and abandonment history, cost of land clearing, distance from population centers, and accessibility of roads and schools. From the cruise and field examination are made site-classification charts, type maps, agricultural land classification reports, slash-disposal reports, timber-classification sheets, and, where necessary, contour maps on a scale of 4 inches equal 1 mile, with contour intervals of 100 feet. Copies of these maps, charts, and reports are on file at the office of the Oregon and California Revested Land Administration, at Portland, Oreg.

2. The Branch of Planning, Use, and Protection

A new branch of planning, use, and protection has been established in the General Land Office. The new branch is concerned to a substantial degree with formulation of general policies and procedures with respect to the disposal and administration of the public lands and with the spot classification of small tracts of land for which application for entry has been made under the various land laws. It is also preparing material of interest to local planning, including maps showing the location of public lands in large areas, such as a State, or watershed, or group of counties. It will make land classification studies of some areas and will collect the results of such studies made by other agencies in areas where there are considerable acreages of public domain land.

In Alaska, the Branch of Planning, Use, and Protection already is contributing to detailed physical and economic surveys which will be valuable to local planning. The Branch may make similar contributions to surveys in other areas which contain large acreages of public domain.

Local Planning Data and Information Available

The chief types of information of value to local planning available in the General Land Office, in the district land offices and in the public survey offices, are the cadastral survey plats and field notes and the status records and plats.

The Cadastral Engineering Service of the General Land Office, which administers the public survey offices, carries on the rectangular surveys of the public-land States. This type of survey, which originated in the New England States during Colonial times, was made the official township survey for the public land States by the Ordinance of 1785. It provides for townships 6 miles square, containing 36 sections of 1 square mile. The object of the survey is to mark on the ground the boundaries of townships, sections, and minor subdivisions, for the purpose of description and disposal of the public domain under the general land laws of the United States, and record the location and characteristics of the land on maps and in the text.

Laws concerning the survey of public lands provide for the following scheme:

The township, 6 miles square, containing 36 sections, each 1 mile square.

The numbering of the townships meridionally into ranges and latitudinally into tiers.

The establishment of guide meridians and correction lines or standard parallels at intervals sufficiently near each other to maintain a practical workable adherence to the legal definition of the primary unit, the township 6 miles square. The subdivision of the townships into 36 sections by running parallel lines through the township from south to north and from east to west at distances of 1 mile.

In making the public land surveys, monuments are established to mark the four corners of each section, as well as the quarter corners on the boundaries of the section. These monuments furnish the foundation for the subdivision of the sections as contemplated by law and the identification of the boundaries of the section.

The General Land Office engineers, in connection with the survey of the public lands, observe the characteristic features of the area being surveyed and describe them in the field-note record.

The plats and field notes representing the public land surveys are filed in the district public survey offices and in the General Land Office in Washington, D. C., and

are available for reference by any interested person. These records on June 30, 1933, represented the survey of 1,317,511,553 acres or over 91 percent of the total area of the public land States, and 2,106,839 acres in Alaska.

The field notes and plat of a survey not only furnish a technical record of the procedure, but also of equal importance a report upon the character of the land, soil, timber, topography, minerals, and cultural features. In some areas which have not yet been covered by soil surveys, topographic surveys, or other land classification surveys, these reports constitute the only available descriptions of land characteristics. The important map features are shown on the maps by the standard symbols adopted by the Board of Surveys and Maps. The hachure is used in most cases to show relief.

The information obtained in making a survey of a township as to the land, soil, timber, evidence of minerals, watering places, drainage, settlement, and industry is summarized by townships in a general description which is the concluding part of the field notes of every survey.

State maps are compiled on a scale of 1 inch equals 12 miles for the public land States, showing the areas covered by the rectangular surveys, national forests, national parks, railroads, cities, and principal physiographic features.

The tract-book records of the General Land Office, consisting of more than 4,000 volumes, show base title record or status of every 40-acre tract of present and

former public lands of the United States. These volumes are the index to the millions of original record files of applications for public land. Copies of more than 6,000,000 patents issued are bound in approximately 9,500 volumes, and the case records for each patent include the land-classification information required by law as a basis for issuance of the patent.

From the records it can be ascertained when the first application was received for each particular subdivision; the date patent was issued; the name of the person to whom it was patented; the act of Congress under which title was granted; the fees incidental to securing title; the legal description and area, and appropriate information as to the character of the land, including in many cases reports of field study by a land examiner. The records also show lands included in Indian reservations, national parks, forest reservations, grazing districts, etc. The dates of all Executive orders and proclamations pertaining to the public lands are noted in the tract books. They also show lands included in mineral leases and lands classified as valuable for mineral. In fact, the General Land Office is the office of record of all Federal action pertaining to each particular subdivision of the public lands, and such action is noted in the tract books.

No record is kept by the General Land Office as to the ownership of the lands after title has passed from the Government. The present ownership of a tract of land which has been patented must be determined from the proper local records.

GEOLOGICAL SURVEY

Geological Act of March 3, 1879 (20 Stat. 394).

Brief General Statement of Agency Functions

The Geological Survey is primarily an agency of research and investigation. The major functions and activities of the Survey are effectuated by five branches: (1) The Geological Branch, (2) The Topographic Branch, (3) The Water Resources Branch, (4) The Conservation Branch, and (5) The Alaskan Branch.

The Geological Branch of the Geological Survey consists of geologists, chemists, and physicists who investigate and study geological problems. These scientists form coordinated groups of specialists, each group occupying specialty fields within the more general field of the science of geology. These groups deal with (1) areal and nonmetalliferous geology, (2) metalliferous deposits, (3) fuels, (4) iron and steel metals, (5) glacial geology, (6) chemistry and physics, (7) paleontology and stratigraphy, and (8) geophysics. It is also the task of this branch to survey the public domain in de-

tail, determining what minerals are contained therein, where they are located, the estimated value of these minerals, and a survey of the geological conditions, favorable or unfavorable, as related to the occurrence thereof.

The Topographic Branch of the Survey is charged with the continuing activity of making topographic maps of the United States, units of which are made available as rapidly as they are completed.

The Water Resources Branch collects systematically for general public information and use facts with respect to the quantity, chemical quality, availability, and utilization of surface and ground water.

The Conservation Branch incorporates all activities of the Survey concerned directly with the use and disposition of public lands and with the production of minerals on the public domain, on Indian lands, and on naval petroleum reserves. It also serves as a consultant to the Government on questions of public domain utility involving geology and engineering; and fur-

nishes engineering supervision of operations in the expanding field of mineral development on leased public and quasi-public lands.

The procedure for the preparation of topographic maps is set forth in Survey Bulletin No. 788, now undergoing revision.

A manual for gaging the flow of streams is now in course of preparation which outlines the methods and practices of collecting an inventory of the surface water resources of the United States.

Activities in and

Assistance to Local Planning

1. *Geologic Branch.*—One important contribution of the Geological Survey is the application of scientific fact-finding methods to its continuing inventory of natural resources. Where, in what quantities, and in what form all the most important needed mineral substances, that in their natural condition are part of the earth's crust, are to be found are problems of the Geologic Branch. The studies of mining districts sometimes guide the development of a district for a generation, and such studies as those resulting in the preparation of basic geologic petroleum maps and the interpretation of broad geologic structural conditions, are important to any survey or evaluation of natural resources, are of current use to industry, and might vitally alter or affect the character of any community involved.

2. *Topographic Branch.*—In the 61 years of the Survey's existence, about 43 percent of the total area of the United States has been surveyed by the Topographic Branch, and the results are published in nearly 8,400 topographic maps. Many of these maps are out of date and must be revised. A number of the earlier maps must be resurveyed. Only about 30 percent of the country can be considered covered by maps adequate for present-day uses.

An example of the value of topographic maps is afforded by the Mississippi Valley floods. Less than half of the Mississippi River drainage area is adequately mapped, and sound plans for the control of the waters of that great river cannot be made without considerable additional basic information. The complexity of the flood-control problem emphasizes the first need of accurate knowledge of the flooded area and its topography as well as of the tributary basins and their relation to one another, so that the engineers can estimate the run-off from those basins for which systematic records are lacking and make plans for the handling of the surplus water. The topographic mapping of the country is a task that vitally affects every section of the country and every class of its inhabitants, and is, of course, of inestimable importance to any and all planning.

Standard topographic maps are made in sections, each covering a quadrangle bounded by parallels of latitude and meridians of longitude. The map sheets are of approximately 15 by 20 inches in size. Since the First World War the Geological Survey has utilized aerial photography in the mapping of some 20,000 square miles of territory.

3. *Water Resources Branch.*—The widespread interest in the quantity, quality, and availability of water for many uses has occasioned a persistent demand for reliable data that would serve as a basis for proper development. To meet this demand Congress has made successive annual contributions for the investigation of water resources by the Geological Survey since 1895. The necessity for such information with regard to water obviously extends to all the people of the country and to many different activities. The Survey is the authorized Federal agency for collecting and publishing data relating to water and is the recognized source of reliable information in regard to questions concerning water supply. The data collected by the Water Resources Branch have served and are now serving as the basis for planning, financing, constructing, and operating hydraulic works of all kinds, including those related to irrigation, water power, industrial use of water, municipal water supplies, flood control, and drainage.

The Water Resources Branch consists of five divisions. The Division of Surface Water measures and records the flow of the rivers and prepares for publication records of daily discharge obtained at about 1,700 river stations, determines the normal run-off from all important watersheds throughout the country, departures from normal conditions, time of occurrence, probable dangers from flood and drought, the silt transported by surface streams, facilities available to prevent loss incident to erosion and actual floods and droughts. The Division of Ground Water studies and reports on the quantity and availability of ground water. The Division of Quality of Water determines the chemical quality of both surface and ground waters with special reference to their use in agriculture and the industries. The Division of Power Resources examines and reports on the water-power resources of the country and the utilization of those resources. The Division of Water Utilization investigates the water resources of the country as a whole, and their utilization.

The Geological Survey cooperates with more than 80 States in these investigations, and a part of the funds used are furnished by those States. Although the studies of water supply have been well distributed over the country, it has not been possible to keep pace with the needs for facts, and only a small part of the Nation's water resources have been investigated.

In order that the field work may be accomplished efficiently, that State officials may be easily consulted as to State problems and State needs, and that they may be served readily with the results of the work as it progresses, the work is conducted through some 25 field offices, to which are assigned permanent Federal engineering employees, who become through long residence and service, local citizens familiar with local problems and requirements.

The Geological Survey cooperates also in these investigations with several other Federal bureaus, including the Bureau of Reclamation, Federal Power Commission, Corps of Engineers, United States Army, Office of Indian Affairs, Weather Bureau, and the National Park Service.

4. Conservation Branch.—The attainment of the ends sought by the Conservation Branch involves as a prerequisite land classification, or a determination at once quantitatively exact and qualitatively true of the best use to which a given tract of public land is adapted. To answer this far-reaching question as put in a variety of forms to the Geological Survey, the Conservation Branch maintains a small force of fact-finding and fact-applying engineers and geologists equally adept at deriving the necessary conclusions from records and data in Washington, or when occasion demands, from the results of their own observations in the field.

The scientific classification of public lands by the Conservation Branch has been in process for approximately 30 years and is still far from complete. The coal resources of the United States, particularly in the public domain regions, have been studied in the greatest detail. The technical data for this work are obtained in considerable part by other technical branches of the Survey. The administration of more than 8,500 coal, oil, phosphate, and potash leases already in force on public and Indian and public petroleum reserve lands, is decentralized by vesting authority in the supervisors stationed in a score of strategic points in the West. Royalties and rentals from these licensed mineral operations amount to some \$11,000,000 annually.

The Water Power Division is a small unit which receives and reviews applications for water projects under the jurisdiction of the Secretary of the Interior. Although the Federal Power Commission conducts most of the work of this nature, there still remain under the jurisdiction of the Secretary grants for power rights of way on Indian allotments and on the public lands. This work is conducted by the Division, except where the rights are water rights, in which case the Power Resources Division of the Water Resources Branch handles the work. After rights are granted, the Division provides engineering supervision. It also makes classification examinations and stream utiliza-

tion surveys. These surveys are of value to water planning, and over 20,000 miles of stream in public land States have been surveyed.

5. Alaskan Branch.—More than 40 percent of the nearly 600,000 square miles of Alaska has been surveyed by the Alaskan Branch to the standard of accuracy required in reconnaissance surveys and has been represented on more than 425 maps and described in 420 reports, covering practically every known mining camp.

Because of technical, financial, and climatic reasons the Alaskan surveys do not at the present time have the accuracy of the more immediately imperative work in the United States. Many of these will in time serve as preliminaries for more exhaustive surveys. The Alaskan Branch also investigates the distribution, character, amount, and value of all mineral resources of the territory, and general topographical data is gathered.

Assistance and aids to local planning on the part of the Geological Survey are of two general types: (1) consultation and advice rendered by the Washington office and the field staffs of the five branches on matters related to their specialty, and (2) actual cooperation with planning agencies on work or projects which are related to the program and field of concern of each particular Branch of the Survey—within the limitations of the funds available and the provisions of the act or appropriation concerned.

In the case of the first of these, the Survey as a whole is prepared to render that consultation and advice which it is able, both at the Washington offices and in the field, according to the extent and disposition of the field organizations of the various branches. The Water Resources Branch works in the field through 37 district engineers, assigned to individual or several States. The field staff under these engineers varies in individual States and according to the division of the branch represented. The great majority of the field personnel are assigned to the Division of Surface Waters, a much smaller number conducting the field activities of the Divisions of Ground Water, Water Utilization, and Quality of Water. The Conservation Branch has some 80 men in the field as supervisors of mining operations and hydraulic engineers, as well as engineers and geologists engaged in land classification activities. At least one district office is maintained in each public land State, and in some States several offices are located. The Geology Branch maintains no district organization as such, but its geologists are constantly in the field on particular assignments in various localities. The Topography Branch field organization is divided into the Atlantic office with its main office in Washington and suboffice at Chattanooga, the Central Division with its main office at Washington and suboffices at

Rolla, Mo., and Denver, Colo., and the Pacific Division with its main office at Sacramento, Calif. Some 150 topographic engineers are working throughout the country from these base points.

The Water Resources Branch of the Survey utilizes the greater part of its yearly appropriation for cooperative work with the States and municipalities; with governments, commissions, boards, and other official agencies. \$900,000 of the current appropriation of \$1,118,000 is being used for such work. These funds must be allocated at least on a 50-50 basis with the cooperating agency. Many of the allocations, however, provide for a less than 50% appropriation on the part of the local agency. This cooperative work includes considerable consultation and advisory work, and actual projects. An example of cooperative planning work by the personnel of the Branch is the case of the District Engineer of Virginia who also acts as chief engineer of the Virginia Water Conservation Commission.

These cooperative activities of the Water Resources are exemplary of those carried on by the other Branches

of the Survey, varying in accordance with the funds and personnel available for each Branch.

Local Planning Data and Information Available

Bibliography

Publications of the Geological Survey. (Not including topographic maps.) May 1938. U. S. Government Printing Office. This pamphlet contains a complete list, to date, of the book publications of the Geological Survey, which include annual reports, monographs, professional papers, bulletins, water-supply papers, circulars, chapters and volumes of *Mineral Resources of the United States (1882-1923)*, folios of the *Geologic Atlas of the United States*, the *World Atlas of Commercial Geology*, land-classification maps, topographic folios, and topographic maps that bear descriptive texts. The Survey's ordinary topographic maps are not listed herein.

The extent, location, and degree of completion of all topographic mapping in the United States by the Topographic Branch of the Survey is shown on the map entitled "Status of Topographic Mapping."

GRAZING SERVICE

Taylor Grazing Act of 1934 and Amendments of 1936 and 1939.
Executive Orders in 1934 and 1935 re Taylor-Grazing Act.

General Introductory Statement

Broadly speaking, the objectives of the Grazing Service are to stop injury to the public grazing lands by preventing overgrazing and soil deterioration; to provide for their orderly use, improvement, and development; and to stabilize the livestock industry dependent upon the public range.

Before the Taylor Grazing Act, unrestricted movements of livestock and overstocking on the Federal range contributed to throwing out of balance the coordinated use of private and public lands.

The very essence of the Taylor Grazing Act requires cooperation of wide scope and detail. This cooperation invokes local planning in the interest of the individual, the community, and the underlying natural resources. In short, the administration of the Act brings the Government and the citizen together, and cooperatively they lay out a plan to bring about proper use of privately and publicly owned land. Thus private land takes its proper place in the scheme of land planning. Values are stabilized, and the local tax structure is revitalized.

Brief General Statement of Agency Functions.

: The Grazing Service administers the Federal range by grazing districts. It effectuates the broad land-

planning and land-use objectives of the Taylor Grazing Act. It is a service agency with specific functions of administration, planning, improvement, and management. Interlocking with these functions are duties involving investigations, studies, and research to secure data for proper decisions and action.

Grazing districts are established by appropriate order, following a hearing in the locality involved and a public notice thereof.

The administration under the Federal Range Code involves: Apportionment of grazing privileges; the management and control of the range; inventory of the resources; the securing of facts pertaining to private properties as a basis for determining those individuals who are entitled to participate in the use of the range; construction of range improvements and erosion control devices; development of the range through management and reseeding; minimizing the effect of destructive elements by protection against flood and fire; the control of insects, rodents, and noxious weeds and providing such coordinated and prudent use of the range as will bring about the greatest public benefit.

The Federal Range Code contains rules and regulations for the administration of the range in accordance with prudent conservation principles. It outlines the procedure for allocation of range privileges under basic law; limits the grazing use to the number of animals which can be safely carried on the range with-

out damage to the soil, water, and forage; sets up rules of the range as a guide to the protection and management of the resources; and outlines the processes by which the individual and the public may prosecute their respective interests in the land. Although rigid in its scope, the Code has the flexibility necessary to allow for climatic fluctuations and other conditions inherent in arid regions.

The number and type of livestock that use the range are governed by the respective licenses issued which specify the proper seasons of use and the particular areas to be grazed. A license properly issued under the law recognizes the relationship between private and public land and the fact that a coordinated use of land has been established. It implies also that subject to possible modification the license will become a term permit when all necessary facts are accumulated and analyzed. Under the law, to effect a proper use of the lands, waters, or water rights owned, occupied, or leased by landowners, preference is given to those engaged in the livestock business and owners of water or water rights who are citizens located within or near a district.

Licenses are recommended by local district advisory boards whose members are elected by the stockmen themselves. These boards also recommend types and locations of range improvements to be made under the various funds available and advise on all matters pertaining to the internal affairs of the district they represent. On each board is a representative of wildlife interests. This member is appointed by the Secretary of the Interior upon recommendation of the proper State fish and game official.

Activities Affecting and Assistance to Local Planning

Prudent range management combined with systematic erosion control and water development projects lessens flood hazards and silting, increases water supplies for irrigation and storage, and preserves the value of adjacent, improved, private lands. The management plan includes a full understanding of local community problems. Since local people are consulted prior to the establishment of a grazing district and the objectives of the plan include proper land use and stabilization of the livestock industry, grazing district boundaries are designed to include insofar as possible community problems that deal with the social and economic structure and common land-use interest of a particular area.

Lands under the administration of the Grazing Service are used predominantly for grazing. Some 12 million cattle, horses, sheep, and goats graze these lands under authority of Federal licenses and permits. This use is a known factor and furnishes a criterion upon which the requirements for livestock feed from all land ownerships can be determined. Control of graz-

ing use focuses land planning for the individual, through his interest and concern in public conservation and the proper use of his own land resources.

In addition to grazing livestock, the Federal range furnishes seasonal feed for thousands of deer, elk, antelope, and other wildlife. Certain areas are now closed to grazing and are reserved for such special public benefits as watershed protection and conservation of community water supplies. Other areas are reserved for the exclusive use of wildlife and for specified common usage by livestock and wildlife. Such refuges and game ranges aggregate about 10 million acres of public land. The proper land-use classification of these areas involves planning with local landowners and stockmen as well as with local, State, and Federal agencies and groups interested in the use of grazing districts for wildlife.

The income from grazing fees amounts to roughly \$1,000,000 annually. Under the law, 75 percent of this income is returned to the localities from which it was collected, 25 percent being made available when appropriated by Congress for the construction and maintenance of range improvements in the districts. Fifty percent of the income is returned to the State for expenditure in the counties where the grazing fees are collected as the respective State legislatures may prescribe.

The Grazing Service has been allotted 89 C. C. C. camps, and in cooperation with the C. C. C., the Army, and with local stockmen the program of range improvements is under way. These activities are decentralized in the States under the general supervision of range-improvements heads who, with the advisory boards, and State and community representatives, have laid out a 5-year plan for range improvements. Fences, wells, reservoirs, truck trails, stock trails, cattle guards, corrals, improvement of springs, posting of boundary signs, fire warnings, stock driveways, rodent control, bridge construction, insect and poisonous plant control comprise the principal types of range improvement in the program. All are designed and carried out in cooperation with the local people affected.

Cooperative activities with local associations of stockmen, railroad companies, individuals, groups, State land boards, and other Federal agencies involve a consolidation of land areas for economic and wise use and for coordinated development and management which affects local planning.

The range is being classified by means of range surveys, conducted by the Grazing Service alone and by the Service in cooperation with State, county, and Federal agencies. Comprehensive studies are being carried forward in selected areas, for the purpose of determining the proper basis for Federal range adjudication and stable range and ranch use based on forage and

economic factors. One such study is nearing completion and involves a gross area of 12,000,000 acres.

The program of classification is set up under the main categories of Special Classification and Range Surveys. Special classification determines the suitability or unsuitability for farming of public land involved in homestead applications, and determines whether allowance of other public land applications will adversely affect the program of conservation and the development of the public range land. This work is very largely based on information and records already available and upon reports resulting from field examination.

Range surveys are an inventory of grazing resources, indicating how they have been handled in the past and constituting background for a program of correct use. A variety of information is assembled from which administrative offices, with the help of stockmen and range survey technicians, may prepare a range management working plan. The surveys determine the quality, condition, use of an area, and the grazing facilities present or needed to effect proper use. The quality of the range is assessed by a carrying capacity study which includes the classification of areas in accordance with their cover—whether trees, browse, or grass—and designating for each type the principal grazing plants occurring therein. A technical assessment of density and palatability percents is then made, which when multiplied produces a factor by which the gross area is reduced to an area wholly productive of entirely edible forage. This net area is expressed in terms of forage acres.

The range survey provides information on soils, waters, fences, trails, and other appurtenances of the Federal range. This information is portrayed on maps which are used in perfecting the plan of range management. The survey also includes a careful examination of all the private properties that are used in connection with the Federal range, and this provides the basis for the proper adjudication of grazing privileges in accordance with the act. The completed maps contain a graphic picture of all the resources involved in the conservation program and are used in the formulation of a comprehensive land-use plan. The Service cooperates in range surveys and land-use problems with all the Government agencies concerned.

The fundamentals of the Taylor Grazing Act were invoked in an interdepartmental economic study of the Middle Rio Grande Basin in New Mexico, in which the present condition and future welfare of some 200,000 subsistence-farming Indians and Spanish-Americans were studied, and plans based on land use were developed as the foundation for the rehabilitation of these groups of people.

Many small communities in the grazing districts are located in the path of customary movements of live-

stock between winter and summer ranges. In planning with these communities, protective areas primarily for the free use of owners of small numbers of livestock kept for domestic purposes have been set up and reserved, and trails rerouted.

The Grazing Service is prepared to aid local planning in both direct and indirect ways. Indirectly, its surveys and classifications are valuable background for planning in the grazing district areas, and are available at the regional offices for use by local planning agencies. Directly, the Service has and will provide aid. Consultant help and advice from the regional graziers is available. A number of these men are working with State planning boards at the present time. The Service does not restrict its aid to consultation, however, but will survey and classify not only those lands which are in or adjacent to grazing districts, but other lands on which grazing considerations affect the basic natural resources of the area. The technicians of the Service work with local and city planning commissions in working out community plans. Planning investigations are also being carried on with certain State planning boards.

Extent of Activities.—The Secretary of the Interior is authorized to establish grazing districts not exceeding in the aggregate of 142,000,000 acres of vacant, unappropriated, and unreserved public land.

There are approximately 12,500 townships, each containing 36 square miles of land, within the boundaries of the 53 grazing districts. The gross area of the grazing-district territory amounts to more than 13 percent of the land area of the continental United States. Some 2,000,000 people, largely rural dwellers, reside in these districts and in large part derive their living from the resources therein. Some 20,000 ranch set-ups are being examined to determine the rights of the owners and lessees thereof to participate in the use of the Federal range. Progress of the work is enhanced through cooperation with Federal and State agencies dealing with common problems in these areas. Approximately 65,000,000 acres have been surveyed to date.

About 10,000,000 acres have been treated for the eradication of rodent and insect pests, and more than 50,000 check dams and water developments have been constructed. About 350,000 acres have been treated for poisonous plants, 6,580 miles of truck trails constructed, 2,123 miles of stock trails built, and 235 bridges installed.

Approximately 20,000 licensees have been granted grazing privileges in 53 districts in Arizona, California, Colorado, Idaho, Montana, Nevada, New Mexico, Oregon, Utah, and Wyoming. On the whole, the Federal range supplies about one-third of the year-long fodder requirement of the animals licensed. Private and State lands intermingled with or near Federal ranges supply most of the remainder.

Local Planning Data and Information Available

1. The Grazing Bulletin issued March 1936, June 1936, September 1936, January 1937, October 1937, March 1938, October 1938, April 1939, December 1939, March 1940, and June 1940.
2. Home Rule on the Range issued in June 1936.
3. The Public Domain Grazing Law issued in June 1935.
4. The Use and Abuse of the Public Range issued in January 1937.

5. Our New National Public Land Policy issued in August 1937.
 6. A New Federal Land Pattern issued in June 1938.
 7. The Building of the Federal Range issued in June 1939.
 8. Conservation Cousins—Grazing and Parks issued in February 1939.
 9. American Democracy on the Range issued in July 1940.
- Maps—Detailed surveys of districts completed or in process of completion can be viewed at the regional offices.

NATIONAL PARK SERVICE

The American Antiquities Act of June 8, 1906 (34 Stat. 225), Organic Act of August 25, 1916 (39 Stat. 535)
Many acts establishing individual national parks
National Industrial Recovery Act of June 16, 1933 (48 Stat. 195)
Presidential Reorganization Executive Orders No. 6166 of June 10, and No. 6228 of July 28, 1933, by authority of the Act of March 3, 1933 (47 Stat. 1489 and 1518)
Emergency Relief Appropriation Act of 1935 (49 Stat. 115)
Historic Sites Act of August 21, 1935 (49 Stat. 666)
The Park, Parkway, and Recreation Study Act of June 23, 1936 (49 Stat. 1894)
Civilian Conservation Corps Act of June 28, 1937 (50 Stat. 819), as amended

General Introductory Statement

The planning activities of the National Park Service affect local planning, both directly and indirectly. Service activities relating to the administration of areas within the national park system have an important influence on local planning. Areas and communities adjacent to national parks and national monuments are influenced by the operation and use by the public of these Federal reservations in various ways, such as the provision of adequate roads and accommodations of all kinds for tourists.

The activities of the Service relating to the American Historic Sites Survey, the supervision of C. C. C. camps on State and local parks and recreation areas, and the activities relating to the park, parkway and recreational-area study directly affect, or are a part of, local planning. The Service is concerned with determining the recreational needs of the people and in assisting in the development of an adequate program for supplying this need by the conservation, development and wise use of the Nation's recreational resources.

Brief General Statement of Agency Functions

The National Park Service is primarily a conservation and recreation agency performing functions which are an integral part of a program of land use of the Department of the Interior. The prime function of the Service is the administration of the national park and monument system. The Service seeks to preserve and render available to the public outstanding scenic, scientific, historic, and prehistoric areas of national impor-

taance. All of these related types of areas are preserved for their intrinsic value.

It is an objective of the Service to cooperate with the States and political divisions in their efforts to preserve scenic, scientific, and historic areas of State importance through State parks and monuments, and to meet the need for recreation through the establishment of recreational areas. To assure the economic and proper administration of such areas, the Service is interested in aiding the formulation of adequate national and State legislation, and the adoption of high standards and policies to guide the selection, planning, development, maintenance, and utilization of public recreational areas.

1. The Service carries on research and educational programs to provide accurate interpretative data relating to natural and historic features within areas comprising the national park system. These data are made available to the public through the Ranger Naturalist Service in the field, and in some instances by publications.

2. Areas are constantly being proposed for establishment as national parks and monuments. The Service, collaborating frequently with local planning agencies, makes investigation of these proposed areas to determine whether they meet the standards necessary for addition to the national park system.

3. The Service is conducting a Nation-wide study of park, parkway and recreational-area programs and facilities. This study is conducted in cooperation with the States by recreational planners with headquarters in the four regional offices of the Service.

4. Under the Historic Sites Act, the Service is conducting a Nation-wide survey of historic and archeologic sites, buildings, and objects. This survey is conducted with the cooperation of the Advisory Board on National Parks, Historic Sites, Buildings, and Monuments.

5. The Service is conducting the Historic American Buildings Survey with the cooperation of a national advisory committee. This survey consists of classifying and producing measured drawings and photographs of important historic buildings in danger of demolition. Material thus obtained is deposited in the Library of Congress and in duplicate form is available for sale to the public.

6. The Service supervises the work of C. C. C. camps assigned to State and local recreational areas.

7. The Service is engaged in a program of design and construction of national parkways.

Field activities of the Service are coordinated through four regional offices located in Richmond, Va., Omaha, Nebr., Santa Fe, N. Mex., and San Francisco, Calif.

Activities in and Assistance to Local Planning

The National Park Service affects or assists local planning in the following ways:

1. Cooperates with State agencies in the conduct of the park, parkway, and recreational-area study to formulate a comprehensive and integrated State-wide program for recreation, based upon recreational needs and resources. This plan should be kept current and used as a guide by all agencies in the development of recreational facilities. These programs are component parts in the formulation of an integrated Nation-wide plan for meeting the recreational needs of the people.

As of June 30, 1940, the recreation study was being conducted cooperatively in 41 States, and 28 of the States had completed preliminary reports and plans. A national report, based largely upon the State studies, is in the process of preparation and is expected to be available in 1940.

2. Supervises the Civilian Conservation Corps facilities in the development of State, county, and metropolitan parks.

Through the facilities of the C. C. C., cooperation has been extended to 47 States, 35 counties, and 78 municipalities in the development of 881 parks and recreational areas.

3. Conducts a park-use study to determine the number, origin, and age grouping of visitors, use of facilities, habits, and interests, etc.

The park-use study, described above, has been conducted cooperatively on approximately 200 State and local recreational areas. The data are now being tab-

ulated and it is hoped that the results will be available within the next few months.

4. Conducts fees-and-charges study to determine desirable principles and practices which should be applicable to the entire field, as well as to determine present schedules of fees charged for facilities and activities.

The report of the fees-and-charges study, made at the request of the American Institute of Park Executives, covering 288 State and local agencies, has been completed and copies are now available.

A study of 1,200 municipal and county parks was conducted cooperatively with the National Recreation Association in 1936, and the results are contained in the National Park Service publication, *Municipal and County Parks in the United States—1935*.

5. Conducts comparative studies of legislation affecting State, county, and metropolitan parks to determine basic provisions and principles, and the preparation of digests for the use of all agencies concerned. Upon request, the Service consults and advises with State, county and local authorities on legislation affecting parks and recreation, and assists in drafting bills.

A digest of State laws affecting parks and recreation was completed in 1935. It is expected that this digest will be revised in 1940. A similar digest of county, metropolitan, and municipal laws has been completed and will be issued in the near future. A digest of Federal and State laws affecting organized camping was published in 1939.

Assistance has been given in the drafting of legislation for State and local parks in 17 States.

6. Conducts an organized camp survey of the number and location of all camps, existing facilities, and personnel, to determine the need for additional camps and to formulate camp programs. Upon request the National Park Service consults and advises with State and local authorities in the planning of campgrounds and organized camp facilities, and on the operation and administration of such facilities.

7. Conducts a study of winter sports, including the observation, analysis, and reporting of snow conditions; first aid; health and safety of participants; desirable practices in the design, construction, and maintenance of structures and facilities; and desirable policies in the regulation and use of public lands for winter sports.

8. Conducts a study of hiking, including desirable practices in the development of trails and hiking facilities; first aid; health and safety of hikers and mountain climbers; desirable policies in the regulation and use of public lands for hikers and climbers; and the development and protection of trailways.

9. Conducts demonstration programs of leadership on natural areas to determine the value and response to certain types of leadership and programs.

10. Conducts a Nation-wide survey of historic and archeologic sites. These sites are being classified in two categories. In one will be listed those sites which are preeminently and nationally significant. In the other will be those having value in local and State sentiment, but not of great importance with respect to the history of the United States as a whole.

The Historic Sites Act provides that the Secretary of the Interior, acting through the National Park Service, may enter into cooperative agreements with State and local groups for the proper preservation, restoration, and use of historic and archeologic sites and buildings, regardless as to whether title thereto is vested in the United States. These cooperative arrangements take the form of contracts between the Secretary of the Interior and such local agencies as the States, municipal subdivisions, corporations, associations, or even individuals. If a local group does not already exist, the Secretary may organize a corporation under the laws of the District of Columbia or any State for the purpose of maintaining, restoring, or administering a historic site for public use. There is consequently a legal basis for a very large measure of cooperation between the National Park Service and various local groups engaged in historical conservation and planning.

11. Cooperates with State and local agencies in the planning for State and inter-State parkways, and advises on policies, standards, and general locations.

12. Develops national parkways. Right-of-way is acquired by the State and transferred to the Federal Government. The construction of parkways such as the Blue Ridge and Natchez Trace Parkways undoubtedly will affect public recreation in the various States. The parkway plans call for the development of recreational and scenic areas at various intervals which will permit picnicking, fishing, swimming, horseback riding, and overnight accommodations. These facilities will add to existing local recreational areas.

General planning for the Blue Ridge and Natchez Trace Parkways has been completed and construction is well advanced. There are 300 miles of the Blue Ridge Parkway graded or under contract, 149 miles of which have been surfaced. The total length of the project is 485 miles. A total of \$21,250,000 has been appropriated for the projects including the 1941 fiscal year budget.

Construction is less advanced on the Natchez Trace Parkway. Of the total length of the project of 455 miles, 86 miles have been graded or are under contract, and 36 of these have been surfaced. A total of \$6,450,000 has been appropriated for the project, including the 1940 fiscal year budget. In addition, individual surveys or preliminary studies have been made for a parkway following the Oglethorpe Trail from Savannah to Augusta, Ga. Preliminary studies have been made on various other proposed national parkways.

13. Is represented on drainage basin committees and subcommittees of the Water Resources Committee, to advise on recreation matters affecting the use of water and the development of the basins.

14. Reviews all recreational W. P. A. project applications, on other than municipal areas and lands under the jurisdiction of the Department of Agriculture, with respect to the need of the proposed facilities, and their conformance with sound planning policies.

Over 200 W. P. A. recreational development project applications, involving an expenditure of approximately \$100,000,000, have been reviewed.

15. Reviews and criticizes all W. P. A. and P. W. A. projects of historic character to determine the basic soundness of all historical, restoration, and preservation work undertaken by the Federal Government. In the field of archeology the Service bears a like responsibility jointly with the Smithsonian Institution for all archeological projects undertaken with emergency funds of the Federal Government.

The Service has reviewed all W. P. A. historic and archeologic projects.

16. Reviews all applications to the General Land Office for the purchase of areas in the public domain for recreational purposes under the provisions of the act of June 14, 1926 (44 Stat. 741) and the act of June 1, 1938 (52 Stat. 609).

17. Acquires and develops recreational demonstration areas to demonstrate better types of land use and to provide recreational facilities where deficiencies exist (under authority of the National Industrial Recovery Act of 1933, as part of a comprehensive program of public works).

In 46 recreational demonstration projects in 24 States, 61 areas involving 400,000 acres have been acquired. Facilities for 71 organized camps, primarily for use of low-income groups, are being developed in 34 areas; approximately 70 of these camps are completed. Facilities for such activities as picnicking, camping, swimming, and hiking are being provided also as rapidly as time and funds permit. Five of these areas have been added to an existing national parkway, one has been added to a national monument, and another has been designated the Manassas National Battlefield Park.

Local Planning Data and Information Available

Planning Information, Data, Maps, Plans, Research Material, Etc.

1937 Yearbook—Park and Recreation Progress. National Park Service, Washington, Government Printing Office, 1938. 55 pp. illus. Price 25 cents (paper cover).

1938 Yearbook—Park and Recreation Progress. National Park Service, Washington, Government Printing Office, 1939. 92 pp. illus. Price 35 cents (paper cover).

Recreational Use of Land in the United States—Part XI of the Report on Land Planning. Prepared by the National Park Service for the Land Planning Committee of the National Resources Board, Washington, Government Printing Office, 1938. 280 pp. illus. Price \$1.25 (paper cover).

Municipal and County Parks in the United States, 1935. National Park Service, Washington, Government Printing Office, 1937. Price 20 cents (paper cover).

Park, Parkway and Recreational-Area Study. FPR Series No. 1. Washington, National Park Service, January 1937. 23 pp. Digest of Laws Relating to State Parks. Washington, National Park Service, 1938. 8 vol. Mimeographed.

Digest of Laws Affecting Organized Camping. Washington, National Park Service, 1938. 113 pp. processed.

Conservation of State Historic and Archeologic Sites. Washington, National Park Service, June 8, 1938. 11 pp. Mimeographed.

The National Park Service in the Field of Organized Camping. Washington, National Park Service, 1937. 10 pp. Mimeographed.

Camping Trends and Public Areas, by Julian Harris Salomon. Washington, National Park Service, May 1938. 10 pp. Mimeographed.

Organized Camps in State Parks, by Julian Harris Salomon. Washington, National Park Service, June 1938. 11 pp. Mimeographed.

Maps and Plans (Other than for National Parks and Monuments). Memorandum for Field Officers, W-5 (Revised) and W-5-1. Washington, National Park Service, 1937. W-5 (Revised). 11 pp. Mimeographed. W-5-1, 23 pp. Mimeographed.

Recreational Areas of the United States. Washington, National Park Service, February 1938. Map.

Fees and Charges on Public Recreation—A Study of Policies and Practices. Washington, National Park Service, 1938. (Now at Government Printing Office.)

A National Plan for Recreation. Washington, National Park Service, Government Printing Office. (Expected to be published by Government Printing Office early in 1940. Title not yet definitely determined.)

The following State reports on the Recreation Study have been completed. Requests for copies or information concerning them should be addressed directly to the appropriate State authority.

Alabama.—Tentative Report of the Park, Parkway and Recreation-Area Study. Published. Department of Conservation, Dr. Walter B. Jones, Director. Montgomery.

Connecticut.—Progress Report of the Recreation Study. Manuscript. Legislative Council, State of Connecticut, Fred A. Scott, Secretary and Research Director. Hartford.

Florida.—Forest Resources—Parks and Recreation. Published. State Planning Board, George G. Gross, Executive Secretary. Tallahassee.

Georgia.—Outdoor Recreation. Published. State Planning Board, Richard C. Job, Director. Best Point.

Idaho.—Preliminary Report of Park, Parkway and Recreational Areas Study. Idaho State Forestry Department, Franklin Glend, State Forester. Boise. Published.

Illinois.—Illinois Park, Parkway and Recreational Area Plan. Published. Illinois State Planning Commission, Robert Kingery, Chairman. 180 N. LaSalle St. Chicago.

Indiana.—Indiana Recreation Study Report. Dept. of Conservation, Virgil M. Simmons, Commissioner. Indianapolis.

Kentucky.—Tentative Final Report—Park, Parkway and Recreational-Area Study, State of Kentucky. State Planning Committee—Governor's Cabinet, Dr. James W. Martin, Chairman. Frankfort.

Louisiana.—Tentative Final Report of the Park, Parkway and Recreational-Area Study. Published as Part III of the First Progress Report of Louisiana State Planning Commission. J. Lester White, Chairman. State Capitol Bldg., Baton Rouge.

Minnesota.—The Minnesota State Park and Recreational Area Plan. Published. Dept. of Conservation, Division of State Parks, Harold W. Lathrop, Director of State Parks. 532 Federal Bldg., St. Paul.

Mississippi.—Tentative Final Report of the Park, Parkway and Recreational-Area Study. State Planning Commission, L. J. Folse, Executive Director and Secretary. 428 Yazoo Street, Jackson. Published.

Missouri.—A State Plan for Missouri—Summary Park Plan. Published. Missouri State Planning Board, William Anderson, Director. State Office Bldg., Jefferson City.

Nevada.—Nevada's Parks. Published. State Planning Board & State Park Commission. Robert A. Allen, State Highway Engineer. State Highway Bldg., Carson City.

New Jersey.—Where Shall We Play? Published. New Jersey State Planning Board, Dr. Maurice F. Neufeld, Acting Secretary. 188 West State St., Trenton.

North Dakota.—The North Dakota Park and Recreational Area Plan. State Parks Committee of the State Historical Society, Russell Reid, Secretary. Bismarck.

Oklahoma.—Parks and Recreation in Oklahoma. Oklahoma Planning and Resources Board, T. G. Gamble, Director, Division of State Planning. State Capitol Bldg., Oklahoma City.

Oregon.—A Study of Parks, Parkways and Recreational Areas of Oregon. State Parks Commission, Samuel H. Boardman, Supt. State Parks, Salem. Published.

Pennsylvania.—Tentative Final Report of the Park, Parkway, and Recreational-Area Study. State Planning Board, F. A. Pitkin, Executive Director. 928 North Third Street, Harrisburg.

Rhode Island.—A Preliminary Report of the Rhode Island Park, Parkway, and Recreation-Area Study. Division of Forests, Parks & Parkways, Ernest K. Thomas, Chief. State House, Providence.

South Carolina.—A Park, Parkway, and Recreational-Area Study. State Commission of Forestry, H. A. Smith, State Forester. State Office Bldg., Columbia.

Tennessee.—Recreation. Published. State Planning Commission. 600 American Trust Bldg., Nashville.

Utah.—Park, Parkway, and Recreational-Area Study. State Planning Board, Sumner G. Margrett, Director. State Capitol, Salt Lake City.

Virginia.—Tentative Final Report—Park, Parkway, and Recreational-Area Study. Virginia State Planning Board, Hugh B. Fomeroy, Director. 1200 Travelers Bldg., Richmond.

Wisconsin.—A Park, Parkway, and Recreational-Area Plan. Published. State Planning Board, M. W. Torkelson, Director of Regional Planning. 14 East Dayton Street, Madison.

Annual Report of the Secretary of the Interior, National Park Service, Government Printing Office. Price 50¢ (paper cover).

Portfolio on National Park and Monument System, issued by American Planning and Civic Association, 901 Union Trust Building, Washington, D. C. Part I. What Are National Parks? Part II. Conservation of Nature. Part III. Preservation of History. Part IV. Facilities and Services. Price: 4 vol. \$1.00.

20th Anniversary National Park Supplement to Planning and Civic Comment, published by American Planning and Civic Association, October-December 1936. Vol. 2, No. 4.
Areas administered by National Park Service. Information Tables, Revised June 30, 1939. Washington, National Park Service. Multilithed.
Our National Parks, by Mary A. Rolfe. Benjamin H. Sanborn & Company, Chicago, New York, Boston. Vol. 1, 1937. Vol. 2, 1938.
National Parks of the Northwest, by Martelle Trager, Dodd, Mead, New York. Price \$2.50.
Circulars of General Information, National Park Service, Washington. Government Printing Office.

Recreation Resources of Federal Lands. National Conference on Outdoor Recreation, Washington, D. C. 1928.
The National Parks and Emergency Conservation Work, National Park Service, Government Printing Office, 37 pages, 1936. (Out of print.)
The National Parks Portfolio. National Park Service, Washington, Government Printing Office, 1931, 6th ed. \$1.50. 274 pp.
Standard Symbols for use in mapping and planning. National Park Service in collaboration with National Resources Committee.

OFFICE OF INDIAN AFFAIRS

The Constitution (vesting in the Congress the power to regulate commerce with the Indian tribes).
Act of Congress of July 9, 1832.
Act of Congress of March 3, 1849.
Section 441 and 463 of the Revised States of the United States.

Brief General Statement of Functions

The Office of Indian Affairs in exercising Federal guardianship over Indians and Indian property has three general objectives:

1. To provide an adequate land base, agricultural credit, and education in land use that will enable all Indians to become economically self-sufficient.
2. To provide every opportunity and to stimulate and encourage Indians to exercise the maximum participation in the management of their own affairs.
3. To encourage and promote improved home, family, and community life and cultural expression.

The Indian Office administers its work through an organization of 63 field jurisdictions, each under the direction of a superintendent, 10 independent schools, 6 sanitariums, 9 district offices, and the headquarters office in Washington. The Washington office functions through professional divisions concerned with education, health, irrigation, extension and industry, forestry and grazing, land, roads, C. C. C., rehabilitation, Indian organization, personnel, fiscal matters, and construction. These several divisions provide professional direction and guidance to the various programs of the several jurisdictions.

Each of 63 administrative field jurisdictions develops for the Indians under its direction a program planned specifically to meet their needs. As a rule planning programs are initiated in the field, usually with professional assistance, supplied by one or more professional divisions concerned. These plans often call for participation by several units of the Office. For instance, the Irrigation Division will undertake to con-

General Allotment Act of 1887.¹
Indian Reorganization Act of June 18, 1934.¹
The Oklahoma Welfare Act of June 28, 1936.¹
The Alaska Act of May 1, 1936.¹
Johnson-O'Malley Act of June 4, 1936.¹

struct dams and provide for the subdivision of lands; the Division of Extension and Industry will aid in the development of the agricultural program; the Roads Division will build the necessary roads; the Education Division will supply needed school facilities.

These plans, fully outlined, are transmitted to the Washington office where they are reviewed. If approved, the Service Divisions concerned authorize allotments of funds or undertake to secure necessary appropriations.

The Office of Indian Affairs has no particular division charged with planning development, but officers on the staff of the Commissioner undertake to stimulate and coordinate such planning. This planning program is part of a total Indian Service program designed to improve the welfare of Indians.

Activities Affecting and Assistance to Local Planning

1. *Planning as Related to Indian Lands.*—The primary object of Indian land policy is to save and to provide for the Indian people adequate land in such a tenure and in accordance with such proper usage that they may subsist upon it permanently by their own labor. Indian land policy purposes the organization and consolidation of Indian lands into proper units determined by the use to be made of the land, the type of labor, capital investment to be applied thereon, and the technical capacities and habits of cooperation of the Indians concerned.

Indian lands are as a rule located in sparsely settled areas in which there are few towns or communities, and in many instances no organized county government.

¹ Acts especially pertinent to planning functions.

Land planning, therefore, is more closely related to regional planning than to more local efforts.

2. Assistance to Local Planning in Connection with Land Acquisition.—The Indian Office provides assistance to each jurisdiction and to each tribal council in determining the land needs of that reservation, and in drawing up a land acquisition and land-use program. Plans for land purchases must be worked out locally and include a statement of the number of Indians to be benefited by the proposed project, the number of families that need to be relocated, what types of school and health facilities need to be provided, the types of farming practiced by the Indians and whites in the region, the use to be made by the Indians of the proposed purchase project, the number of economic units to be set up and the number of individual acreage units, together with all data such as that concerning improvements, equipment, and livestock.

3. Assistance to Reservations in Planning for Land Consolidation and Utilization.—Employees of the Indian Office aid Indian tribal councils in developing a program that will make possible more adequate use of available land holdings through consolidations. These consolidations are effected by exchanges among individual Indians, by tribal purchases from individual Indians, and by plans for the use of lands in heirship status.

4. Assistance to Local Groups in Land Reclamation.—Through its irrigation service, its rehabilitation program, its C. C. C. work, and other activities, the Indian Service aids local groups to develop irrigation water resources and to reclaim and put into productive use land in semiarid and arid sections. This planning is often done in cooperation with state and regional planning groups and its results are available to such groups.

5. Assistance in the Development of Proper Land Management Plans.—The Indian Service aids local Indians to draw up plans for proper land management including the definition of grazing units, and the establishment of proper range-carrying capacities. The Service aids Indian groups to plan for proper management of their forests on a sustained yield basis.

The Indian Office has carried on investigations to determine the needs of various groups of Indians, the proper use that might be made of their existing resources, physical inventories of soil types, and surveys of human dependency. The Service conducts reconnaissance surveys of forest areas to determine volume of timber by species, topography, forest types, soil types, forest reproduction, condition of the timber as to distribution, growth, damage by fire, insects, and diseases. The Service conducts range surveys, establishes range units, and aids Indian groups in drafting

regulations for the use of the range, the granting of grazing privileges, the development of water for livestock, and range revegetation. Approximately 46 million acres of forests, woodlands, and grazing lands are directly affected by these activities.

Surveys and investigations have been made to adjust irrigation charges and to determine the economic status of irrigation projects, and to protect the water rights of a number of reservations. Several of these investigations have been made in cooperation with other agencies, both Federal and State. In cases where the planning problems of lands administered by the Office of Indian Affairs are interrelated with those of adjacent communities or overlapping regional areas, the Office will cooperate indirectly with the appropriate planning agency by research and consultation, and directly by special studies and a cooperative action program within the limits of the acts applicable and the funds available.

6. Assistance in Community Planning.—Agricultural credit and grants and loans for housing are being given to a number of Indian groups who have developed small communities. Programs involving complete rehousing with related subsistence gardens and livestock have been carried out with several groups of Indians.

7. Assistance in Recreational Planning.—The Service has assisted numerous Indian groups to plan for and develop the recreational possibilities on their reservations. Areas have been set aside for hunting and fishing, guide services have been developed, and emphases have been placed upon the conservation of wildlife and the maintenance of wilderness areas intact.

Indian reservations under the jurisdiction of the Federal Government are located in 25 States and Alaska. The great bulk of these are located in the Western States. These reservations contain approximately 54,800,000 acres of land, 87 percent of which is tribally owned, and the remaining 33 percent in allotments held in trust for the benefit of individuals.

Local Planning Data and Information Available

- List of TCR-IA Reports. (Reservation studies by Soil Conservation Service (Mimeographed).)
- Listing the various Reconnaissance, Physical, Human Dependency and Economic, Socio-Economic, Soil and Erosion, Land Classification and Agronomic, and Wildlife Surveys; Preliminary and Final Reports; Maps and Survey Maps; Programs; Recommendations; Preliminary and Final Plans; and special studies and reports for various Indian Reservations in the 8 districts administered by the Office of Indian Affairs.
- Handbook of Indian Land Policy and Manual of Proceedings. Mimeographed bulletin of Office of Indian Affairs.
- Report and Recommendations, Interdepartmental Rio Grande Committee. Department of Agriculture, Department of Interior, Washington, D. C., October 1937.

PUERTO RICO RECONSTRUCTION ADMINISTRATION

Executive Order of May 1935 (P. R. R. A. set up as part of relief organization).

General Introductory Statement

In the absence of any permanent planning board or commission affecting Puerto Rico specifically, it has fallen to the Puerto Rico Reconstruction Administration to substitute a planning program of its own which would best direct the economic reconstruction of the entire island and its 2,000,000 inhabitants.

With no local planning group to work with directly on projects of a general nature, the P. R. R. A. has had to carry on its planning activities along lines in which it is especially concerned.

In a few cases such preliminary planning has been accomplished through studies made by officials of the P. R. R. A. and other Federal or insular agencies directly concerned with the project in view, and this type of planning has culminated in coordinating agreements between the Administrator of the P. R. R. A. and the particular agency or agencies concerned in the fulfillment of the project.

In the majority of cases, however, the planning has been performed solely by the Administration in its attempt to make up for the lack of planning facilities on the island. This planning, which has been coordinated wherever possible with insular and Federal agencies outside its organization, has covered a wide field and has entailed a considerable amount of study on the part of P. R. R. A. officials with regard to what is best for the future of Puerto Rico.

Brief General Statement of Agency Functions

The economic condition of the island at the time of the establishment of the Administration was at low ebb. It was felt necessary that there be some program of economic reconstruction and rehabilitation to aid Puerto Rico's rapidly-increasing population in the search for a way out of the chaos brought on by the depletion and erosion of the soil; the destruction of entire crops by hurricanes; the decline of world markets for Puerto Rican products; the use of antiquated agricultural methods; and the obstacles of absentee ownership of a majority of the island's best agricultural land, an island where 90 percent of the people depend upon agriculture for a living.

The P. R. R. A., organized under the Department of Interior, and deriving its funds from the appropriations of the emergency relief acts, set out to help the Puerto Rican help himself, to aid in the general restoration of employment and to improve the standards of living for the island's citizens.

What the Administration has accomplished during the last 4 years, however, cannot be relegated to the category of direct relief. Generations to come probably will benefit more from the reconstruction accomplished by the P. R. R. A. than from the work of any other agency operating on the island. The reason for this is that P. R. R. A. works have been planned with the theory in mind that what Puerto Rico needs is not a direct dole-like service from the Federal Government, but a carefully planned economy, upon which the people can erect a stable trade and develop a reasonable proportion of self-sufficiency.

The P. R. R. A. program has gone even further than this. It has attempted to make available to Puerto Rico's unfortunates at least a minimum of medical and social service, at least the beginnings of cultural development.

That careful planning was the first requisite for Puerto Rico's improved economy was uppermost in the minds of those who established the P. R. R. A. A review of the economic history of Puerto Rico revealed that poor planning or a complete lack of it might well have been the cause of the catastrophic collapse which preceded the organization of the P. R. R. A.

Activities Affecting and Assistance to Local Planning

Coordinated Program for Agricultural Development.—The Administration instituted in August 1938 a program of coordinated activities for the development of agriculture, involving the Insular Department of Agriculture and Commerce, the Insular Agricultural Experiment Station, the College of Agriculture and Mechanical Arts of the University of Puerto Rico, the Insular Department of Education, the Puerto Rico Tobacco Institute, the Puerto Rico Experiment Station of the United States Department of Agriculture, and the Puerto Rico Reconstruction Administration, the Insular Agricultural Extension Service.

As its part in this coordinated program, the P. R. R. A. assigned \$118,850.00 for personnel, equipment, and materials to be used in such activities as the Insular Subsistence Planting Project; the development of 4-H Club work, commercial crops, livestock and poultry raising, farm management and organization; home demonstration work among the resettlers; and various research projects involving the propagation of vanilla, bamboo, perfume plants, grasses, quinine plants and spices as additional sources of revenue for Puerto Rico's farmers.

Coordinated Program for Soil Conservation.—Approximately 90 percent of the population of this island depends directly or indirectly upon the products of the soil for a living. For the past four centuries little attention has been paid to conserving the soil in any way. The problems faced by the Federal and Insular agencies cooperating in the establishment of a definite program of soil conservation have been many and varied.

Since Puerto Rico's topography is of many types, soil erosion has been abetted by the fact that the Puerto Rican landscape is covered with small hills and mountains from which much of the top soil has been washed during the last 300 years. In some cases the problem has become even more aggravated, where top soil has been washed into the valleys, covering the original soil there.

In 1938 a special cooperative agreement between the P. R. R. A. and the Soil Conservation Service of the United States Department of Agriculture was drawn up and approved. According to the agreement the P. R. R. A. furnishes general personnel and equipment while the Soil Conservation Service provides technical experts to supervise the work. Unusual progress has been made since the agreement was signed and this year for the first time soil conservation projects are being prosecuted on private lands as well as on Federal-owned property. The amount appropriated for soil conservation work during the coming fiscal year is \$500,000.00.

Rural Electrification.—To aid the insular government in the development of the island's natural resources, the P. R. R. A. has carried out an intensive water resources program. These projects have been planned and constructed only after careful study and deliberation with insular and municipal authorities.

Three projects, with a total power potentiality of 40,000,000 kw-h. have been completed and were transferred to the insular government. A fourth project, Las Garzas, partially completed, has been transferred to the insular government and will be completed with a loan and grant from P. W. A. The fifth project, Dos Bocas, is still under construction by the P. R. R. A.

Extensive studies, made by P. R. R. A. and insular government officials, of rainfall and run-off statistics have proved these hydroelectric projects to be economically sound.

Socio-Health Studies.—In collaboration with the School of Tropical Medicine, an affiliate of Columbia University and the University of Puerto Rico, the Health Division of the P. R. R. A. has completed three studies of health and socio-economics in Puerto Rico. The first study concerns Puerto Ricans living in the sugarcane plantation districts and the second study was based on the findings among inhabitants of the

tobacco, coffee, and fruit regions. The third is a study of the physical measurements of agricultural workers. These studies included the collection of statistics and data on population, housing, nutrition, general health conditions, families, marital conditions, education, social problems, religion, and economic conditions.

The spirit of cooperation which exists between the Federal and insular agencies in Puerto Rico, encouraged and promoted by the P. R. R. A., has made such valuable studies as these possible.

Cooperatives.—One of the rapidly growing institutions in Puerto Rico today is the cooperative. The P. R. R. A. has taken an active part in the encouragement and establishment of numerous cooperatives among Puerto Rican farmers and tradesmen. Of the 13 cooperatives on the island today the P. R. R. A. supervises or sponsors 11. Eight of these handle farm products, one handles farm supplies, another, string rugs, and a third, novelties. P. R. R. A. officials have found, in planning the improvement of agricultural methods and marketing with groups of farmers, that a successful method of surmounting the obstacle of the large corporation, which by dominating land and capital stifles individual enterprise, is the organization of cooperatives. In the true cooperative the producer controls his own purchase of supplies, production, and marketing, thereby shortening the route between producer and consumer. The hope of the P. R. R. A. in planning these cooperatives is that by aiding the people in collective action, more of the consumer's dollar will be secured for the producer.

Cattle Tick Eradication.—The most serious obstacle to the establishment of healthy dairy herds in Puerto Rico has been the cattle tick. In 1936 a coordinated agreement was drawn up between the P. R. R. A., the Insular Department of Agriculture and Commerce, and the Bureau of Animal Husbandry of the U. S. Department of Agriculture, whereby the P. R. R. A. furnishes equipment and personnel; the Insular Department furnishes the services of its established personnel and the Bureau of Animal Husbandry provides technical experts to supervise a complete eradication of the cattle tick. To date, eradication work has been completed in the western zone, is practically finished in the central zone, and will soon be started in the eastern zone of the island. At the present time, 235,000 head of cattle, horses, oxen, and goats are being treated every 14 days in 502 vats constructed for the purpose.

Forestry.—Slightly more than a century ago Puerto Rico was described as an island completely covered with forests. Four years ago, U. S. Forestry experts found the island almost denuded of trees. The Luquillo National Forest comprising about 17,000 acres constitutes the only solid block of remaining vir-

gin vegetation. In the central "backbone" range of mountains there were, until several years ago, a few valuable forests covering high peaks but since they were for the most part privately owned, they were disappearing rapidly when the present forestry plan for Puerto Rico was put into effect. In 1936 the Insular Forestry Service, the Federal Forestry Service, and the Forestry Division of the P. R. R. A. were put under one chief to better facilitate the reforestation program. Plans were laid by the officials of these three agencies for a complete reconstruction of the Puerto Rican forests. To date, a total of approximately 100,000 acres of forest lands have been purchased for incorporation in the national and insular forests. Up to June 30, 1940, approximately 19,954,000 trees had been produced in the island's nurseries for replanting in the forest areas.

So effective has been the cooperation of the Forestry Service with the general rehabilitation work of the P. R. R. A. that a system has been worked out whereby resettlers are being given submarginal forest land upon which to build homes and raise subsistence crops.

In return for the receipt of this land and privileges, each settler is given 2 acres to be reforested for each 1 acre to be used for agriculture. He may also receive part-time employment on nearby forestry projects.

Miscellaneous Coordinating Activities.—Cooperating with the Insular Department of Education the P. R. R. A. has conducted its school construction and repair program according to designs and in locations furnished by the Department of Education.

During the years 1939 and 1940, 58 concrete buildings for rural and urban schools, comprising 157 classrooms, were built at a cost of approximately \$1,894,500. Repairs to rural and urban schools for the year totaled \$86,500. P. R. R. A. also has constructed municipal waterworks, roads, sewer systems, medical dispensaries and community centers in locations selected after studies made by municipal, insular, and P. R. R. A. officials.

The Eleanor Roosevelt Development of 471 living units and the Juan Morell Campos Development of 150 units, as well as the Falansterio, an urban slum clearance project of 216 living units, are a part of the P. R. R. A.'s efforts to improve housing and living conditions in the urban as well as rural areas.

The recent inauguration of an elaborate fortification program on the part of the United States Army and Navy has found the P. R. R. A. cooperating to the fullest extent.

Among the projects which the P. R. R. A. has administered in connection with this program are the restoration and reconstruction of ancient Spanish fortresses now used as barracks for United States Army officers and men, the bolstering of sea walls which sur-

round the city of San Juan, the construction of a new U. S. Naval Radio Station in San Juan and the homes, garages, and utility systems for Navy personnel.

The P. R. R. A.'s Aerial Map Unit supplies hundreds of prints to various Federal, insular, and municipal agencies for use in planning many types of projects. During the fiscal years 1939 and 1940, the Survey Unit of the P. R. R. A., cooperating with other agencies, completed nearly 3,400 survey cases covering approximately 27,850 acres of land.

Local Planning Data and Information Available

Planning Information, Data, Maps, Plans, Research Material

1. Report of the Puerto Rico Policy Commission. 1934. Carlos A. Chardon. 146 pp.
2. Rehabilitation in Puerto Rico.^a 1939. General Information. 48 pp.
3. Facts About the P. R. R. A.^a General Information. Mimeographed. #2—(1937)—85 pp.; #3—(1939)—English, 23 pp. #3—(1939)—Spanish, 19 pp.
4. Health and Socio-Economic Studies in Puerto Rico:^a
 - (a) On a Sugar Cane Plantation. English and Spanish. 94 pp. 1937.)
 - (b) In the Coffee, Tobacco, and Fruit Regions. 1939. English, 289 pp.; Spanish, 383 pp.
5. Annual Report of the Puerto Rico Reconstruction Administration. Year ended June 30, 1939.
6. Aerial Survey of Puerto Rico. 1936-37. Complete photographic map based on 3,590 original negatives kept on file in 74 mosaic sections, showing Puerto Rico and its possessions.
7. Symbolic Map Showing P. R. R. A. Activities. 1939. Large-scale map illustrated with symbols in colors depicting location and nature of all P. R. R. A. projects.
8. Photographic Files. Approximately 4,000 photographs of P. R. R. A. activities are on file, most of them with corresponding negatives.
9. Monthly Progress Reports of the P. R. R. A. Rural Rehabilitation Division, Engineering Division, Rural Electrification Division, and Forestry Division.
10. El Granjero y Su Casa.^a Monthly publication distributed to P. R. R. A. resettlers. Mimeographed and varying in size. Contains features, illustrations.
11. Soil Conservation Data:
 - (a) Soil Survey of the Island of Puerto Rico. (Bureau of Chemistry and Soils.) Unpublished.
 - (b) Reconnaissance Erosion Survey of Puerto Rico. Soil Conservation Service, U. S. Department of Agriculture.
 - (c) Report on Soils of Puerto Rico. R. C. Roberts. Unpublished.
 - (d) Geology of Puerto Rico. H. A. Meyerhoff, University of Puerto Rico.
 - (e) Scientific Survey of Puerto Rico and the Virgin Islands. New York Academy of Sciences.
 - (f) Studies of Acid Soils of Puerto Rico. Oscar Loew, Puerto Rico Agricultural Experiment Station.

^a Available to the public.

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- (g) Report, Reconnaissance Erosion Survey, Puerto Rico, 1935. In manuscript form only.
 - (h) Preliminary Investigations of Soil Erosion Conditions in Puerto Rico, Studying Particularly the Problems Involved in Establishing Stations for Investigation of Conservation of Soil and Water. In manuscript form only.
 - (i) Reconnaissance Soil Conservation Map of Puerto Rico. 1935. Soil Conservation Service.
12. Social Service Source Material:
- (a) Standards of Living in Rural Puerto Rico. Luz M. Ramos and Dorothy Bourne. 1933. Puerto Rico Department of Education.
 - (b) A Report on Wages and Working Hours in Various Industries and on the Cost of Living in the Island of Puerto Rico. 1933. Puerto Rico Department of Labor.
 - (c) Dietario Economico para una Familia de Dos Adultos y Cuatro Niños de 1 a 7 años de edad. Rosa Marina Torres and the class in nutrition and dietetics at the University of Puerto Rico.
13. General Source Material; Annual Reports:
- (a) Puerto Rico Agricultural Experiment Station, U. S. Department of Agriculture.
 - (b) Puerto Rico Agricultural Experiment Station, Insular Department of Agriculture and Commerce.

DEPARTMENT OF WAR

THE CORPS OF ENGINEERS, UNITED STATES ARMY

Established by Act of March 16, 1802,

Civil Duties Assigned by Act of April 30, 1824, and Subsequent Acts.

General Introductory Statement

In the prosecution of civil works, the Corps of Engineers, U. S. Army, is a planning, regulatory, and construction agency responsible for the improvement and preservation of the navigable waters of the United States and their tributaries. Its duties include the accomplishment of these works of improvement of rivers, harbors, and other waterways adopted by Congress in River and Harbor and Flood Control Acts and authorized to be prosecuted under the direction of the Secretary of War and supervision of the Chief of Engineers.

The use of the Corps of Engineers in the construction and planning of public works was first authorized by Congress in 1824. Since that time it has been called upon to build highways, railroads, and canals, improve rivers and harbors, safeguard navigable waterways, and plan development of streams in the interest of navigation, flood control, hydroelectric power development, pollution control, and conservation.

The Corps of Engineers is not an initiating agency. The work in the field is effected through 47 districts, grouped into 11 divisions, conforming roughly to watersheds. It cannot consider improvements except by specific congressional directive.

The Corps undertakes research but only insofar as applicable to specific problems. It has no authority for endeavors in the field of abstract research. Likewise, the Corps of Engineers is limited in its informative activities and its publications are confined to essentials, primarily maps, information to navigators, commercial statistics and necessary general information on major projects.

Brief General Statement of Agency Functions

General Functions.—The functions of the Corps of Engineers have been clearly defined by law. They include:

1. Federal investigations and improvements of rivers, harbors, and other waterways.
2. Federal investigations and improvements of rivers and other waterways for flood control and allied purposes.
3. Regulation of the construction and alteration of bridges across navigable waterways.

4. Regulation of operation of drawbridges.
5. Issuance of permits for construction of encroachments upon navigable waterways.
6. Regulation of navigation, fishing, floating of timber, logs, and rafts, use of establishment of anchorages, and dumping of refuse in waterways.
7. Establishment of harbor lines.
8. Removal of wrecks from navigable waters.
9. Regulation of discharge of refuse matter into navigable waters. Administration of the Oil Pollution Act of 1924.

There have been created several boards having specific duties and consisting entirely or largely of officers of the Corps of Engineers who report to the Chief of Engineers. These include:

(a) The Mississippi River Commission composed of seven members, three of whom, including the President, are officers of the Corps of Engineers, was created by act of Congress in 1879. This Commission has jurisdiction over the water development of the lower Mississippi Valley. Surveys and construction are performed for the Commission by the districts of the Lower Mississippi Valley Division.

(b) The California Debris Commission, composed of three officers of the Corps of Engineers, was established by Congress in 1893 to develop plans for the control of floods and debris and to regulate hydraulic mining in the Sacramento and San Joaquin River Valleys.

(c) In 1902 the Board of Engineers for Rivers and Harbors was created by Congress. Its seven members, all officers of the Corps of Engineers, pass on every examination, survey, and project reported on by the Department.

(d) By congressional acts approved in 1930 and 1936 the Beach Erosion and Shore Protection Boards were created. These Boards, the former consisting of seven members four of whom are officers of the Corps of Engineers and the latter consisting of four Engineer officers, are concerned with problems affecting the maintenance and protection of shore lines and beaches.

Procedure.—After an item is enacted into law by its inclusion in a flood control or river and harbor bill and funds are made available, the district engineer concerned is directed to make a preliminary examination. This phase of the study requires a delimitation of the problem by contact with the interests of the section of the country concerned and the preparation of a preliminary plan and economic study to ascertain whether the problem is sufficiently meritorious to warrant the expenditure of Federal funds for a detailed survey.

The preliminary examination is reviewed in turn by the division engineer, the Board of Engineers for Rivers and Harbors, and the Chief of Engineers. If a survey

is approved, it is ordered performed and a report thereon is submitted through the same channels.

The report is then transmitted to Congress. In the event that Congress adopts the project in a River and Harbor Act or a Flood Control Act, it is prosecuted as funds are made available by subsequent Congressional appropriation.

Activities Affecting and Assistance to Local Planning

While the works prosecuted by the Corps of Engineers are primarily of national importance, nevertheless they are intimately linked to local development. The local plan must consider national waterway and flood-control improvements and all other water uses concerned.

The development of harbor lines and the regulation of bridge and encroachment construction affecting navigable waterways are distinctly related to local planning.

The liaison between the Corps of Engineers and local units is close. Public hearings are held in connection with every study; local interests are consulted throughout the development of a plan; and most projects require local participation. The Corps makes available to local planning units all factual data collected and all reports submitted to Congress. Should a project

be finally considered of insufficient national merit for Federal construction, the plan is available for local interests to study, accept, and develop themselves.

Particular activities of the Department resulting in information of value to local planning agencies include mapping, hydrologic studies, stream gaging, subsurface exploration, economic analyses, investigation of transportation trends, and gathering of commercial statistics.

Local Planning Data and Information Available

Bibliography

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Annual Report of the Chief of Engineers.

Manual of Procedure in Beach Erosion Studies.

"308" Reports.—A series of reports printed as House Documents of the Congress, made in compliance with the Act of January 21, 1927, on streams listed in House Document No. 308 Sixty-ninth Congress, First Session. These reports present plans for the development of streams for navigation, irrigation flood control, and hydroelectric power development.

The Port Series.—A series of 81 reports on the harbors of the Nation.

The Lake Series.—Nine reports on lake ports.

Transportation Series.—Four reports on transportation and transportation lines.

Miscellaneous Series.—Four reports relevant to port, terminals and shipping charges.

FEDERAL LOAN AGENCY

FEDERAL HOME LOAN BANK BOARD

Federal Home Loan Bank Act Approved July 22, 1932.

Home Owners' Loan Act Approved June 13, 1933.

Title IV of the National Housing Act Approved June 27, 1934.

Amendatory Act to the National Housing Act Approved April 27, 1934.

Amendatory Act to the National Housing Act Approved May 28, 1935.

Brief Statement of Agency Functions

The Federal Home Loan Bank Board is a regulatory body, created to charter and regulate Federal home loan banks, to charter and regulate Federal savings and loan associations, to create and operate the Home Owners' Loan Corporation, and to operate the Federal Savings and Loan Insurance Corporation.

Federal Home Loan Bank System.—This system was established to provide a central reservoir of credit for thrift and home-financing institutions. The United States, including Puerto Rico and the Territories of Alaska and Hawaii, is divided into 12 districts with a regional bank located in each. There must at all times be at least 3, but not more than 12 districts.

The capital stock of the regional banks is subscribed by the institutions which have been granted membership in the system and by the Secretary of the Treasury. Their chief source of loanable funds, other than capital subscription, is through the sale of debentures or bonds which may be either the obligation of the individual bank or the consolidated obligation of all banks. Other loanable funds are obtained through deposits accepted from member institutions, from other Federal home loan banks, from the United States and its instrumentalities, the borrowing of money, and by discounting loans with other Federal home loan banks.

A total of \$300,000,000 has been made available for the purchase of obligations and securities of the Federal home loan bank members and institutions insured by the Federal Savings and Loan Insurance Corporation. The membership of the system has shown continuous growth from its inception and the total membership as of August 31, 1939, has reached 3,942 institutions.

Federal home loan banks grant both long and short term loans to member institutions and to nonmember institutions approved under title II of the National Housing Act upon the security of mortgages insured by the Federal Housing Administration.

The banks do not grant loans to individuals or private borrowers.

Home Owners' Loan Corporation.—This Corporation is an emergency relief agency of the Federal Government and under the supervision and direction of the Federal Home Loan Bank Board. Its general purpose was to grant long-term mortgage loans at low interest rates to those home owners who were in urgent need of funds for the protection, preservation, or recovery of their homes, and who were unable to procure the necessary financing through the normal channels. The great majority of its loans were granted in order to refinance homes, thereby saving them from foreclosure.

The Corporation is directed and controlled by the 5 directors, who constitute the Federal Home Loan Bank Board. There are 10 regional offices and 31 State and equivalent field offices, operated throughout the United States and in Hawaii and Puerto Rico.

The personnel of the Corporation has the duty of liquidating the mortgages of the Corporation, including the collection of its loans and the management and disposition of such of the properties as the Corporation has acquired through foreclosure proceedings.

In accordance with the Home Owners' Loan Act of 1933, the lending activities were terminated June 12, 1936. During the 3-year period loans were made to 1,017,844 borrowers, aggregating \$3,093,450,842. These loans were made on the security of nonfarm homes having a value not exceeding \$20,000, built to accommodate not more than 4 families, and occupied by the owner or held by him as a homestead. The Corporation made maximum loans of 80 percent of the appraised value, but not to exceed \$14,000.

The Corporation now holds over 1¾ billion dollars of first-mortgage loans on 771,155 homes and has acquired title to 163,998 properties, aggregating \$897,797,596. The capital stock of the Corporation is fully paid for by the Secretary of the Treasury in the amount of \$200,000,000, against which it was permitted to issue bonds in an amount not to exceed \$4,750,000,000.

Federal Savings and Loan System.—This system was established to provide local mutual thrift and home financing institutions in which depositors could invest their funds and to provide for sound and economical home financing. As of May 31, 1940, 1,415

charters had been granted to institutions. The Federal savings and loan associations are incorporated by Federal law and charters issued by the Federal Home Loan Bank Board. These associations may be organized throughout the United States and its territories through a petition of private citizens for a charter, or by application of a State-chartered institution which is a member of the Federal Home Loan Bank System, for permission to convert into a Federal savings and loan association.

Federal Savings and Loan Insurance Corporation.—This Corporation was created to insure the savings of depositors in the thrift and home financing institutions. Its organization comprises an executive office and staff in Washington and the presidents of the 12 Federal home loan banks who act as regional agents for the Corporation.

The Corporation guarantees the safety of withdrawable investments and investment and credit earnings in an amount not to exceed \$5,000 per investor. All Federal savings and loan associations and State-chartered building and loan associations, savings and loan homestead associations, and cooperative banks approved for insurance by the Federal Savings and Loan Insurance Corporation, are provided with this safety for savings. As of May 31, 1940, there were 2,231 insured institutions with total assets of \$2,653,665,000.

Activities Affecting and Assisting Local Planning

As a result of its experience in the lending of approximately 8 billion dollars on old homes, 163,388 of which it has been forced to acquire through foreclosure proceedings, the Home Owners' Loan Corporation is conducting a comprehensive program to encourage and strengthen confidence in home ownership. The program involves not only the preservation and protection of existing structures, but protective services to new home seekers of small and moderate means. The new program divides itself into:

1. *The Federal Home Building Service Plan*, a program designed to bring together realtors, lending institutions, architects, material dealers, contractors and others of the building industry, in an effort to provide sound design and construction in the small-house field. Consultation and advice relating to the Plan is available in the regional banks and other institutions which have accepted for operation the Federal Home Building Service Plan.

2. *The Neighborhood Conservation Program*, which is designed to study causes and cures of neighborhood blight and to protect sound residential areas from encroaching slums.

3. *A City Survey*, which is an analysis of property values to indicate which metropolitan areas are declining, which face eventual obsolescence, and the causes of these costly trends.

The Federal Home Building Service Plan is a joint undertaking of industry and government to afford the essentials of an adequate advisory and supervisory service at a fee within the budget of the home builder of small and moderate means. The essential aim of the plan is to simplify, through proper organization and intelligent planning, the seemingly complex process of building, thereby insuring the lender of a safer mortgage investment and the owner of a better home. To this end, the service provides:

1. Sound financial counsel, the largest loan and the most liberal terms consistent with the resources and credit of the individual.

2. Competent architectural guidance in designing the home as a suitable structure for the family needs, the site and the neighborhood, the assurance of a qualified builder and proper material specifications.

3. Supervision of the construction from its inception to the completion of the home, thereby insuring the owner of maximum dollar value.

4. A certificate of registration that the home has been built under the plan, thereby strengthening investment security and resale value.

The plan is a local enterprise, directed and financed by local capital, with assistance by the Federal Home Loan Bank Board in the organization and promotion of the service.

As of May 10, 1940, 305 home financing institutions in 106 communities had applied for the facilities provided by the service plan and 897 small home plans had been approved.

The Neighborhood Conservation Program is concerned with residential neighborhoods which are slowly deteriorating. The program is not concerned with actual present slum areas, which are within the province of the United States Housing Authority, but with the salvaging of areas in which the present downward trend is indicative of a condition which will ultimately result in a slum.

The initial step of the program embraces a survey to determine the causes and cures of substantial neighborhood conditions. The ultimate realization of the program would involve:

1. The reconditioning of properties which have been acquired by the Home Owners' Loan Corporation through foreclosure proceedings.

2. The advance of funds for reconditioning of properties upon which the Home Owners' Loan Corporation holds a mortgage, providing, of course, private funds are not available for that purpose.

3. The financing by mortgage and insurance companies of similar improvements on homes not mortgaged through the Home Owners' Loan Corporation.

4. Agreement by individual owners to improve their properties.

5. The making of funds available for such improvements through member lending institutions of the Federal Home Loan Bank System.

6. The provision by local and city authorities for necessary neighborhood improvements, including streets, parks, playgrounds, etc.

The first phase, a survey of neighborhood conditions, purposes to accomplish three objectives:

1. Ascertainment of the underlying physical, social, and economic conditions insofar as they relate to the present physical condition of the area.

2. Development and analysis of findings with regard to the causes and cures of substandard physical conditions in the area.

3. In coordination with the city's housing program, development of plans and general recommendations for the physical and economic rehabilitation of the area, including neighborhood improvements and the reconditioning and remodeling of individual homes, streets, and other neighborhood facilities.

The second phase of the program deals with the formation of a neighborhood association to carry out the plan resulting from an analysis of the social, physical, and economic conditions and changes developed by the survey.

Local Planning Data and Information Available

The Federal Home Loan Bank Board publishes monthly the Federal Home Loan Bank Review, in which there is contained articles on residential construction, small-house building costs and trends of the cost of labor and materials used in the construction of small homes.

Survey of Economic, Real Estate, and Mortgage Finance Conditions.—Surveys of the economic real estate and mortgage finance conditions and trends and their relation to the activities of the agencies under supervision of the Federal Home Loan Bank Board, are prepared for cities having a population of more than 40,000. The survey is made up of:

1. A report showing these conditions, trends, and probable future local economic conditions, together with conclusions based upon these data.

2. A security area map which divides the city into definite residential areas and grades these areas on their long-time trend

of desirability and security from a residential real estate point of view.

The information is gathered by field agents through broad and extensive research, following an outline of some 61 headings covering 8 principal fields:

1. Economic background and prospects.

2. The real estate market.

3. The mortgage lending market.

As a separate part of the analysis or survey, the agent then prepares the security area map, supported by area descriptions. The map serves as a medium for visually projecting the effect of local conditions and trends on the residential real estate of the community as developed in the survey. Thus far, 236 city surveys have been completed. Because of the confidential nature of these reports, they are made available exclusively to the executive branch of the Federal Home Loan Bank Board and its affiliates.

State Summaries.—Summaries are prepared at least twice a year, giving general statistical information concerning the statement, such as estimated wealth, total population, number of nonfarm homes, etc. The main body of the summary is divided into three parts, the first of which is a brief statement of the favorable and unfavorable conditions developed in the balance of the report. The second part has to do with the general nonfarm mortgage situation which portrays in part the factual basis for the conclusion. The third part develops conclusions resulting from trends and factors in the economic situation underlying the real estate mortgage security. The sources of material for these summaries are regular reports prepared by national, State, and mutual savings banks, building and loan associations, life insurance companies, and agencies of the United States Government.

The State summaries are distributed solely within the executive branch of the agencies under the supervision of the Federal Home Loan Bank Board.

Building Cost Index.—Since 1936, the field staff of the Reconditioning Division of the Home Owners' Loan Corporation has collected construction cost data from an average of 90 cities, reports coming from each city every 3 months. The data collected from the field covers prices to contractors on the many items going into the construction of a typical 8-room, frame house. The report also includes the union wage scale and prevailing wage scale of the various trades engaged in small home construction. With this information the Washington office has established an index designed primarily to indicate the trends in construction costs. Local offices of the E. O. L. C., real estate brokers, members of the Federal Home Loan Bank System and others are finding this index useful in their operations, particularly as it relates to appraisal work. Newspapers have found the index useful in connection with analyzing construction costs in their communities as they relate to costs in other communities of comparable size, with the view to correcting local situations, for instance higher costs of materials or labor racketeers in their respective areas. This survey is available to all subscribers of the Federal Home Loan Bank Review.

FEDERAL HOUSING ADMINISTRATION

National Housing Act of 1934.

Amendments of May 28 and August 23, 1935.

Amendments of April 3 and April 17, 1936.

General Introductory Statement

The Federal Housing Administration seeks to strengthen and stabilize the Nation's system of financing home ownership and to provide rental housing for families of moderate income. It insures mortgage and other loans made by private lending institutions. In carrying out its program, the F. H. A. aids in providing and promoting better housing and fosters stimulation of the building industry.

By its standards and requirements, the F. H. A. seeks to establish sound planning and building practice and proper neighborhood protection in the residential field.

As provided by the National Housing Act, there are three types of credit insurance.

Title I was enacted principally to increase the flow of capital and to stimulate employment by creating a demand for labor and materials necessary in property-improvement work. It protects banks and other lending agencies against losses on loans not in excess of \$2,500 for the improvement of existing structures or for the construction of new buildings. The borrower obtains time-payment financing at a lower rate than ever before available for this type of credit. The insurance coverage on property-improvement loans amounts to 10 percent of the aggregate advanced by the lender.

Under title II, section 203, the F. H. A. insures long-term amortized mortgages up to \$16,000 and 80 percent of valuation, secured by new or existing dwellings approved as to plan and location, and up to \$5,400 and 90 percent of valuation, secured by newly constructed owner-occupied dwellings approved before the beginning of construction and inspected during the course of construction. Section 207 of this title provides for the insurance of multi-family and group housing mortgages ranging in value up to \$5,000,000 and 80 percent of valuation. Private groups and certain public bodies may operate under this section with regulatory control exercised by the F. H. A., and with provision for resale of individual units to individual buyers. Operations under title II are designed to achieve a sustained long-term residential construction program with a minimum expenditure of Federal funds and a maximum reliance upon private enterprise.

Brief General Statement of Agency Functions

One of the major factors influencing the value of residential properties is the risk inherent in neighbor-

hood deterioration. Inasmuch as experience has shown

that poorly planned neighborhoods depreciate and dis-

integrate at a faster rate than do houses, the F. H. A.

has developed a method of measuring neighborhood

quality by means of location standards. Dwellings that secure insured mortgages must be situated in neighborhoods offering security against decline in desirability due to the encroachment of inharmonious land uses. The property must also be accessible to suitable employment areas, market centers, and schools.

The Land Planning Division was established to aid in the attainment of these standards. This division consists of a small administrative staff in Washington and a field organization of experienced land planning consultants stationed in eight key cities, from which they cover the entire country.

No loans are insured in new or undeveloped areas until the location has been carefully analyzed and a report received from the consultant indicating that F. H. A. standards have been met. The analysis covers such matters as suitability of the site from the standpoint of topography, soil, transportation, accessibility to schools, shopping and recreational areas, suitability of utilities and street improvements, adequacy of such protective measures as zoning and restrictive covenants, and suitability of the subdivision plan.

Activities Affecting and Assisting Local Planning

During 1939 the Land Planning Division analyzed and made complete reports on 2,615 subdivisions, comprising 84,657 acres and 282,890 lots. This brings the total number of subdivisions analyzed to 4,340. Over 1,600 subdivisions have been inspected and consultations held with developers, during which suggestions as to the proper handling of the properties were made. As consultants on rental housing projects, members of the division have made over 750 studies and reviews. These rental housing projects provide garden-type apartments at moderate rentals.

This accumulation of experience enables the F. H. A. to give authoritative advice on the best property layouts for maximum ultimate efficiency, the best price range for the particular property involved, as well as the design type which holds the greatest promise of acceptability by the home-buying public. The division knows from experience what importance attaches to proper zoning and to the relationship of the property to the surrounding area. The service provided by the Land Planning Division not only contributes to the

success of the individual projects, but also enables them to establish themselves according to good standards of plan and design—which were significantly absent in too many subdivisions in the past.

The Division of Research and Statistics has conducted considerable exploration into the economic background of planning and into the making of housing surveys. Techniques for real property, vacancy, and real estate activity surveys have been worked out in cooperation with the W. P. A. and advice on the best methods of conducting such surveys is available to a limited extent at F. H. A. offices.

Local Planning Data and Information Available

In the Land Planning Division many examples of faulty and corrected subdivision plans have been gathered together. These drawings and reports illustrate graphically those faults commonly found in subdivision work and the best methods of design to correct them.

Copies of real property inventories and other studies made in conjunction with the W. P. A. are maintained in the regional and central offices of the F. H. A.

A number of articles on planning have appeared in the Insured Mortgage Portfolio. These contain maps of the built-up areas in leading metropolitan areas at various stages of their growth, and also indicate the location of high, medium and low-rent areas at various periods. A monograph on city growth and structure, entitled, "The Structure and Growth of Residential Neighborhoods," is available. Since it is based on a large volume of detailed material not covered in previous studies, this publication represents a real contribution to the literature available to planners.

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areas, and municipalities included in the different State and district administrative areas. These pamphlets are issued under the general titles of "Circular No. 2, Property Standards, Part VI," and "Minimum Construction Requirements for New Dwellings." Both publications can be obtained only from F. H. A. State or district insuring offices. Free.

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Land Planning Bulletin No. 1, Successful Subdivisions. FHA-2094. Free.

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Analysis of Housing in Peoria, Illinois. 1935. FHA-2021. Free.

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FEDERAL SECURITY AGENCY

NATIONAL YOUTH ADMINISTRATION

Executive Order No. 7086 of June 26, 1935.
Various Relief Appropriation Acts.

Reorganization Plan No. 1 effective July 1, 1939.
National Youth Administration Appropriation Act, 1941.

Brief General Statement of Agency Functions

The National Youth Administration has three major purposes: (1) To provide unemployed and out-of-school youth, largely from relief families, with part-time employment on socially useful projects which provide work, experience, and related training that enhance their chances of obtaining private employment; (2) to assist needy young people in earning their way through school, college, and graduate school; and (3) to encourage the establishment of vocational guidance and private employment services for youth. The work program, the student aid program, and the guidance and placement program are the instruments through which these three major purposes are carried out.

Within the limitations of the President's allotments, the Youth Administration is free to divide the funds among the several States. Distribution is effected in accordance with certain specifications based on the size of the youth relief population, or in the case of the college student work program, in accordance with college enrollments.

The N. Y. A. has its own administrative organization, Federal, State, and local, which determines policies and procedures in the administration and supervision of its program throughout the Nation. The Washington office, where the National Administrator is located, is largely an advisory and coordinating unit. There is a small executive committee and a national advisory committee of 32 members representing youth, education, labor, industry, and agriculture.

The program is administered on a decentralized basis, each State having an Administrator who has major responsibility for planning and running his own program. The detailed operation of the N. Y. A. program in the several States varies according to local needs and problems, as a part of the State administrative organization. State advisory committees appointed by the National Administrator have been set up to advise as to the best type of youth program for the State, to offer proposals for the development and execution of the program, and to promote interest in it. Individual members frequently cooperate in planning work projects for youth and in fostering the development of State-wide projects. For convenience and efficiency of

administration, every State is divided into districts, each usually comprising several counties. For every district there is a supervisor, responsible directly to the State Administrator. Responsible to the district supervisors are the project supervisors who provide the direct contact between the Youth Administration and the youth participating on the projects.

The local advisory committees are organized variously on district, county, rural, urban, and other community bases. They generally assist the local officials of the Youth Administration by sponsoring projects, obtaining contributions, planning projects, interpreting the needs of youth and promoting the N. Y. A. generally.

The major part of the administration of the college work program is placed in the hands of the college officials concerned.

To enlist and insure the cooperation of the public in the execution and development of its program, the N. Y. A. has in principle worked in close cooperation with local, State, and Federal governmental agencies and with numerous nongovernmental organizations.

Since its inception, the National Youth Administration has been allocated about \$328,000,000 and has employed on the average 500,000 young men and women a year. All told, about 2,500,000 different youth have been aided. Of the total sum, \$208,000,000 has been allocated for the out-of-school work program, \$120,000,000 for the student work program and \$5,000,000 for administration. With an appropriation of \$100,000,000 (included in the above total) for the fiscal year 1939-40 the N. Y. A. is employing an average of 720,000 young people, 400,000 students and 270,000 out-of-school youth.

Activities Affecting and Assistance to Local Planning

The National Youth Administration, within the limits of the funds available, has carried on its work through three major programs: (1) The out-of-school work program, (2) the student work program, and (3) the guidance and placement program.

1. Out-of-School Work Program.—Youth are employed on this program from 2,903 of the 3,071 counties in the Nation. In 22 States, youths from every county in the States were employed in this program. Since

the beginning of the program, cooperating agencies assisting in the operation of the N. Y. A. projects have expended a total of \$32,598,904 or almost 15 percent of the \$222,670,479 expended by both the Federal Government and cooperating agencies through April 31, 1940. The current annual cost from Federal funds per worker is approximately \$250, of which \$224 or 98 percent is for labor and \$26, or 10 percent, is for nonlabor expenditures. Cooperating sponsors spent nearly \$52 per worker per year. The average monthly payment to project workers was approximately \$15.89, and the average age of N. Y. A. youth 19 years, 9 months. The largest groups of youths were employed on clerical, workshop, and public buildings projects. Smaller groups were working on recreational; home economics; professional and technical; highway, road and street; recreational leadership; and miscellaneous projects. Yet smaller groups were concerned with other fields.

During the fiscal year ending June 30, 1933, 3,120 new buildings or new additions to existing buildings were constructed by N. Y. A. youth; and 7,728 old edifices were repaired or improved. New highways, roads, and streets were built to the extent of 187 miles; and 2,225 additional miles were repaired and improved. Considerable additional construction work was accomplished in connection with these roads. The construction of recreational facilities included the building or improvement of 71,621 acres of parks and rodeo grounds; 6,323 playgrounds; and 2,060 athletic fields. In conservation work, 136,554 acres were treated for soil erosion control; 6,188 check dams were constructed; 1,838,244 trees planted and 1,474 tree nurseries built; and many other projects completed. Other types of work by N. Y. A. youth included the production or renovation of clothing, household articles, hospital supplies, furniture, lumber, concrete articles, foodstuffs and books.

At the present time, the National Youth Administration is operating 1,632 workshops in which 38,327 young people are employed. Of these, 23,900 boys are engaged in woodworking; 5,100 in metal and mechanical work; 3,800 in automotive units; 1,500 in radio and electrical units; 1,200 in aeroplane units and 2,800 in related work. Present facilities can be expanded without further equipment to provide shop employment and experience for 73,980 youth.

Resident project units were initiated on a national scale in the spring of 1937, after experimentation with respect to the difficulty of aiding small groups of youths widely scattered over rural areas. By gathering these scattered groups into a resident unit, better supervision and instruction, as well as more useful and efficient work, is obtained. Because of their success, a limited number of resident units have been instituted to assist urban youth.

The N. Y. A. has approved more than 650 of these resident projects located in 46 States, with 32,000 young men and women in attendance. Many of the projects are operated in conjunction with agricultural and mechanical schools, teachers' colleges, vocational schools or hospitals.

During the fiscal year 1938-39, a further type of resident project was developed—the regional project. Outstanding young men from various projects in a region are given the opportunity of attending a regional center where added attention is given to the development of their abilities. These centers give more technical and specialized exploratory work experience, especially in the mechanical fields, to the youth, as well as more advanced courses in related information. Approximately 2,000 young men are enrolled in regional centers at the present time.

The total number of youth employed on the out-of-school work program in March 1940 was 325,560. On the basis of the annual turn-over and after allowing for the reemployment of youth leaving N. Y. A. projects, it is estimated that 570,000 different persons worked on N. Y. A. projects during the year. One-fourth of the 332,237 young people leaving these projects entered private employment.

These work programs of the N. Y. A. are of concern to local planning in that a proportion of the work accomplished will have a direct or indirect effect on local planning. Such projects as these involving the erection of buildings, construction and improvement of roads, mapping, planting of millions of trees for reforestation, building of dams, and work in recreational parks are all directly related to local planning.

2. Student Aid Program.—This program provides part-time employment to needy youth between the ages of 16 and 24, inclusive, in regular attendance at school, colleges, and universities. The program is divided into two major parts—the school aid program and the college and graduate aid program.

The student aid program assists needy students in non-profit-making and tax-exempt bona fide educational institutions. Each participating institution is responsible for the preparation of its plan of work and for deciding on the eligibility of the student applying for assistance. Employment on the student aid program commences in September with the opening of schools, rises rapidly through October, continues to expand and reaches a yearly peak in April, recedes slightly in May, and drops off at a tremendous rate in June. In July and August, when most schools are closed for the summer, little or no employment is reported.

A survey of the area encompassed by the N. Y. A. student aid program indicates that the program is being carried out in practically every section of the

country. During the school year 1938-39 the program was operating in all but 17 of the 3,071 counties of the United States, and all but nine States had such programs in every county within the State.

In the peak month of 1939, 278,000 secondary and high school students were being assisted by the N. Y. A. College and graduate students numbered 111,000.

All students receiving assistance under the student aid program work for the money they receive. Individual institutions are directly responsible for planning the work to be performed by the N. Y. A. students. The work must be of a nature that it does not displace regularly employed persons and insofar as possible, is correlated with the student's chosen field of study, future plans, special aptitudes and interests. Approximately 68 percent of the work activity is in research, surveys, and statistics; community service; and ground and building maintenance. The remaining 43 percent are spread out in smaller percentages among varied services.

3. Guidance and Placement Program.—This program helps young people to secure jobs in private industry, in line with their interests and aptitudes. Through the cooperation of the State employment services, the National Youth Administration has helped establish junior placement divisions in 195 cities in 41 States as a part of the State employment services. As of July 1, 1940, the N. Y. A. will no longer have any financial responsibility for these services; and they will either be taken over by the State employment services, as has been the case in many instances, or they will be abandoned. Since the first office was established on March 1, 1936, until March 1, 1940, over 691,000 young people have been registered; 285,000 placed in private jobs, and 181,000 employers visited.

An interesting administrative device working toward more effective local planning have been the advisory committees which have in many cases helped to promote the welfare of youth in the States and in the localities.

The National Administrator has, in cooperation with the State Youth Administrators, appointed the State advisory committees to advise on the most desirable types of program for the State and to assist in the formulation and development of the program on a State-wide basis. During the past year there were 783 members of State advisory committees, representatives of education, agriculture, labor, business, and youth, receiving no remuneration.

The local advisory committees have been organized on a county and community basis to assist the localities in the planning of projects. There are 8,013 local advisory committees with over 18,000 members. Last

year there were 1,455 county-wide committees and 1,558 city or town committees. In addition, there were some 855 special committees which assisted the local N. Y. A. supervisors to work out special programs of all kinds related to youth.

The administrative organization of the N. Y. A. itself in its advisory committee set-up and general programming outlook evidences an acknowledgment of and provision for the inclusion of the planning concept in the administration of the youth relief programs. Furthermore, this administration has been so organized as to extend down to the local level and actual point of relief application. Local planning bodies can further their own planning programs by working in cooperation with the advisory committees, and can at the same time in many cases contribute valuable background to the committees themselves in planning and outlining suggested N. Y. A. programs.

Many and varied public, quasi-public and private agencies, such as chambers of commerce, local boards of education, local parent-teachers' associations, the American Legion, Lion and Rotary Clubs, and the like, have contributed funds, professional direction, or supervision to N. Y. A. projects. Many, if not most, of these agencies have their work closely linked into local community or State-wide plans serving the community.

The statistics, social data and experience, and various studies and surveys of the N. Y. A. are themselves valuable material for relief, economic, and socio-economic planning.

Local Planning Data and Information Available

Through the N. Y. A. student work program considerable research work and surveys of value to local planning agencies are being carried out. In many of these the N. Y. A. merely supplies youth labor in the form of clerical aid. In view of this fact, most of this research and survey work is available only through the sponsoring and directing agency concerned.

Examples of this type of work are listed herewith:

1. Legal research and surveys—survey of records of law students; study of property law, study of merchant law; transcription of legal debates in foreign countries; compilation of social welfare laws; compilation of insanity laws, etc.
 2. Occupational surveys and research; guidance investigation and research.
 3. Sociological research—contemporary social theories, family life in America, etc.
 4. Economic research—social concept of money, industrial development, business trends, etc.
 5. Soil research—preparation of "Soil Profile" samples; translation of scientific articles; use of special laboratory equipment; plant pathology; soil conservation and flood control.
- Surveys.**—Surveys were made of building illumination; of graduates, their professions, salaries, etc.; of delinquency; of Negro population; of student life; of business; of traffic; of use of food products; of relief youth; etc. The majority of these

surveys are available through local and State sponsoring organizations.

Statistics, Charts, Maps, Graphs.—1. Scoring tests; tabulating results of tests; determining norms and averages; statistical checking and compilation; gathering statistical data, analyzing statistical information.

2. Making maps—historical, land, delinquency areas, game areas, weather, campuses.

In addition to the research and survey activities carried on by the student aid program, extensive assistance is given many agencies through the work program in the form of clerical assistance.

Map Making.—The N. Y. A. has initiated and is extending a series of map-making projects based on aerial surveys. (Aerial

photos are available for about 70 percent of the United States.) Many useful projects, such as rural electrification, soil conservation, regional economic planning, rural resettlement, and economic studies of housing loans will be helped by these maps.

Bibliographies

Youth—Selected Bibliographies, including a section on publications by the N. Y. A.

General Summary—National Youth Administration, October 1939.

The National Youth Administration prepared by the Advisory Committee on Education. 1939. U. S. Government Printing Office, Washington, D. C.

OFFICE OF EDUCATION

Organic Rehabilitation Act of 1920.

National Vocational Education Act of 1917.

Brief General Statement of Agency Functions

The Organic Act of 1867 creating what is now the Office of Education indicates very clearly that it was the intention of Congress to establish a Federal agency which would assist the States and localities in planning educational facilities and programs. The act makes it a responsibility of the Office of Education "to collect statistics and facts showing the progress of education in the several States and Territories, and to diffuse such information respecting the organization and management of schools and school systems, and methods of teaching, as shall aid the people of the United States in the establishment and maintenance of efficient school systems, and otherwise promote the cause of education throughout the country."

In accordance with the cardinal reason for its establishment, the Office has maintained continuous research, investigations, and reporting as essentials for effective State and local educational planning. To the end that there shall be Federal participation in education which will assist State and local communities to provide educational opportunities for all, the Office of Education renders service through:

1. The contribution of information and basic data, disseminated on a Nation-wide scale, for assisting in State and local educational planning.

2. The contribution of direct services to State and local school systems in planning their programs.

Financial aid to educational systems and institutions is appropriated for specific purposes and made available with only limited Federal administrative controls.

By the National Vocational Education Act of 1917 and subsequent legislation, a system of Federal-State relationships has been established in vocational education. Under this system the Organic Act making

Organic Act of 1867.

funds available for vocational education, requires a State to prepare plans for its vocational programs. These are submitted by the State board for vocational education to the Office of Education for approval by the Commissioner of Education. The State's plans, together with supporting legislation, constitute a contract between the Federal Government and the State for vocational education.

The Organic Rehabilitation Act of 1920 together with subsequent legislation establishes for civilian vocational rehabilitation similar Federal-State relationships as does the Vocational Act of 1917.

Activities Affecting and Assistance to Local Planning

The activities of the Office of Education that are of assistance to local planning in education may be described under the following heads:

1. Making and reporting research studies and investigations basic for State and local planning.

Research studies and investigations of value to the planning of educational programs are made periodically. An example is the biennial survey of education, for which statistical data are collected from State and local school systems on such items as school enrollments, teachers, capital outlays, and costs. Statistical studies in special fields of education are made either at irregular intervals or as occasion may dictate.

Comprehensive studies in major fields of education, such as secondary education, teacher training, and school finance are made on a Nation-wide basis to discover the status quo, trends, and outstanding practices which will provide information for the guidance of local schools in planning the improvement of their services. Current problems in these phases of education are subjects for study within the limits of the facilities of the

Office. Examples of such current problems are those of school administration, school curriculum, teaching methods, the preparation of teachers, school finance, school buildings and equipment, and pupil personnel.

In the field of vocational education, research studies and investigations are constantly being made by the Office and also in cooperation with State departments of education. Usually research in vocational education covers the same classifications as are indicated in general education but with specific applications to vocational programs. However, as the Office has the responsibility for administering the Federal acts providing cooperation with the States in establishing and maintaining vocational training and the public schools, the research studies and investigations are given such directions as will make them of most value for organizing, administering, and evaluating vocational plans and programs in the several States.

Financial, statistical, and descriptive accounts of the vocational programs in each State are collected annually and prepared as a Digest of Annual Reports of State Boards for Vocational Education. This digest shows trends and developments in all phases of vocational education.

In order that a State's plan for vocational education may be kept in step with changing conditions, each State revises and resubmits its plans every 5 years to the Office of Education for approval. The various studies and investigations that have been made in the interim are used by the States in modifying their plans for vocational education for resubmission to the Office of Education.

In the field of vocational rehabilitation, studies basic to the planning of State and local programs are made of the disabled; of methods of rehabilitating particular groups such as the deaf, blind, and tubercular; and of suitable types of employment for different classifications.

2. Making State and local surveys of educational systems and institutions.

From its beginning the Office of Education has upon request and as its facilities permit, made surveys of public school systems both State and local, and of other educational institutions for the purpose of evaluating their programs and making recommendations for their improvement. A large number of reports on comprehensive educational surveys of States, cities, localities, and particular educational institutions have been published, and constitute an important contribution to educational planning.

The results of State-wide surveys in vocational rehabilitation are used by State boards in modifying their programs, which in turn have influenced local communities in revamping their training programs. The Office makes such surveys approximately every 5 years.

These studies cover basic conditions in the State, the administration and case-work organization, and the case-service program.

3. Rendering consultative and advisory services.

Consultative and advisory services to individuals, institutions, and school systems serve as aids in planning educational programs and their administration and are rendered by the Office both through correspondence and in person. These services are limited by the size of the Office staff and by the funds at its disposal. The Office has given special attention to the preparation of materials that may be effectively used in answering correspondence requests for information on problems in which there is a general and continuing interest. A considerable amount of the time of staff specialists is devoted to interviews with persons coming to the Office for information and advice on planning and conducting local programs.

The Office renders consultative and advisory services and serves as a clearing house for the discussion of current educational problems, through the conferences it holds and its participation in conferences conducted by other agencies for the purpose of improving educational practices. In addition, specialists of the staff render advisory services to local agencies as a part of the field work of the Office.

The regional agents and specialists in each of the vocational fields for which Federal reimbursement is provided, spend a major portion of their time with representatives of State boards for vocational education and teacher-training institutions. While working in the several States they visit many local departments of vocational education, and consequently have the opportunity to observe the effectiveness of the teaching practices, the facilities of the schools, and the extent to which the program is actually functioning. A trained staff of 40 or 50 specialists from the Office of Education is constantly engaged in such activities. This results in a very close cooperative working relationship between the States and the United States Office of Education in planning for vocational training. Correspondence also plays a large part in providing consultative services in planning for vocational education. This is especially true for the follow-up of field trips and for answering requests that require information obtained from research studies and investigations.

The Office of Education renders advisory and consultative services to a State in the preparation of its plans for vocational education and must give final approval to the plans submitted by a State before it can participate in the distribution of Federal funds for vocational education. The assistance and the approval of the Office of Education in the preparation of State plans governing the organization and maintenance

nance of vocational schools and classes pertain to: The kinds of vocational education for which Federal money shall be used, courses of study, methods of instruction, qualifications of teachers, training of teachers, and State provisions for the administration and supervision of vocational schools and classes.

4. Conducting and cooperating with other agencies in planning and conducting educational programs and demonstrations.

In cases where special funds are available for the purpose, the Office conducts and cooperates with other agencies in conducting educational programs in new fields, and in planning and conducting experimental work and demonstrations.

The Office of Education maintains a script exchange which has made available to 7,000 educational and civic groups, high-quality radio scripts free of cost.

The home economics service of the Office has during the past few years given special assistance in the development of four demonstration programs in family life education. Two of these are county-wide and two are State-wide programs. In order that the experience in planning and conducting these programs may be made available to a large number of school officials, one of these programs is operated in each of the four administrative units into which the United States is divided for home-economics education. In vocational rehabilitation the field staff occasionally, at the request of a State, cooperates in planning demonstration and experimental work for special groups such as the deaf and blind.

The Office of Education also spends approximately \$4,000,000 annually on C. C. C. education in 1,500 camps enrolling about 300,000 persons.

5. Administering Federal laws governing the use of funds appropriated for education.

Federal funds for land-grant colleges and universities are administered through the United States Office of Education. As these funds are for the promotion of agriculture and mechanic arts through formal courses of instruction, this Office has been designated to supervise the expenditure of these funds for the several courses of study authorized by statute. The program involves 52 white and 17 Negro land-grant institutions.

Through the administration of Federal laws appropriating money for vocational education and vocational rehabilitation, the Office of Education directly influences State and local planning in these fields of education. The United States is divided into regions for each of the phases of vocational education for which appropriations are made and there is an agent for each region. The regional agents in agriculture, home economics, trade and industrial education, business education, and vocational rehabilitation working

under their respective chiefs of service, are the field representatives of the Office of Education for the administration of the various vocational education and vocational rehabilitation acts. One of their major responsibilities is to review carefully the several State plans for vocational education and vocational rehabilitation when they are submitted to the Federal office for approval to see that they are adequate to meet the needs of the State and that they conform to the Federal acts and policies of the United States Office of Education. Another direct influence on local planning results from the responsibilities discharged by regional agents in auditing, annually, vocational education and rehabilitation accounts of the States in their respective regions. As such audits are for the purpose of determining whether Federal funds have actually been spent in accordance with the Federal acts and the State plans approved by the Office of Education, the regional agents are in a position to assist State and local school systems very materially in planning programs in accordance with established standards for effectiveness.

6. Aiding through Federal appropriation.

Appropriations to land-grant colleges and universities administered through the Office of Education amount to more than \$8,900,000 annually. The Office administers Federal funds, going annually to the States, amounting to almost \$21,000,000 for vocational education and to almost \$2,000,000 for vocational rehabilitation.

Local Planning Data and Information Available

1. Publications.—(a) "Bibliography Series."

Bibliographies concerning such subjects as: Guidance, Education of women, Nursery education, History teaching, Education and social change, Education for family life, Visual aids in education, Summaries of studies in agricultural education, etc.

(b) Legislative provisions for educational activities.

Bulletins, pamphlets, or circulars on such subjects as: Legal and regulatory provisions affecting secondary education, Compulsory school attendance laws and their administration, Review of educational legislation (biennial survey), Legislation concerning early childhood education, etc.

(c) Organization and administration of educational activities.

Bulletins, pamphlets, or circulars on such subjects as: School administration and finance (biennial survey), Adult education (biennial survey), Reorganization of school units, Reorganization of secondary education, School building situation and needs, Principles and procedures in the organization of satisfactory local school units, Larger units for educational administration, Availability of education to Negroes in rural communities, Procedure for a survey of a State program of vocational rehabilitation, Trade and industrial education, etc.

(d) Instruction (curriculum).

Bulletins, pamphlets, or circulars on such subjects as: Development in educational method, Teacher education curricula, Conservation in the education program, Offerings and registrations in high school subjects, Training bulletins on fire fighting,

police and fire service, Light frame house construction, Reorganization of the individual farm business, Farm forestry, etc.

(e) *Financing education.*

Bulletins, pamphlets, or circulars on such subjects as: University unit cost, State provisions for equalizing the cost of public education, Per capita cost as in city schools, State school taxes and school funds and their apportionment, Guide to present and to effective legislation for financing public education, Vocational training cost, State aid for consolidation and pupil transportation, etc.

(f) *Pupil personnel (including guidance services).*

Bulletins, pamphlets, or circulars on: Programs of guidance, Young men in farming, Some factors in the adjustment of college students, Federal courses in agricultural extension work, vocational education, and vocational rehabilitation, Discovering occupational opportunities for young men in farming, etc.

(g) *Instructional personnel: Preparation and qualifications of teachers and other employees.*

Bulletins, pamphlets, or circulars on: Professional education of teachers, Selection and appointment of teachers, Teacher personnel of the United States, etc.

(h) *Instructional personnel: Salary schedule and retirement provisions.*

Bulletins, pamphlets, or circulars on: College salaries, Retirement systems, Economic status of rural teachers, Salary and education of rural school personnel, etc.

2. *Personal services.*—(a) Information furnished by correspondence.

(b) Surveys of individual educational systems and institutions, the published reports of which, however, have value for other educational systems and institutions in planning their programs.

(c) Studies of special problems of individual educational systems and institutions for the purpose of making recommendations for their solution.

(d) Advisory services to individuals and groups coming to the office for information and consultation relative to educational planning.

(e) Services on committee and with educational organizations furnishing leadership in educational planning.

(f) Field services rendered State and local school systems in planning their educational programs.

Such services are rendered, as occasion demands and as State and local educational agencies request them, in accordance with the laws under which the Office operates. The extent and frequency of such services, however, are limited by the facilities which the Office has for providing them.

SOCIAL SECURITY BOARD

Social Security Act of 1935 (49 Stat. 620).
Social Security Act Amendments of 1939.
Chapter 9, Subchapter C, Internal Revenue Code.

General Introductory Statement

The Social Security Board administers the duties imposed upon it by titles I, II, IV, VII, X, and XI of the Social Security Act as amended, and chapter 9, subchapter C of the Internal Revenue Code, having to do primarily with old-age and survivors insurance, unemployment compensation, and public assistance to the aged, to dependent children, and to the blind. These measures were adopted as part of a national program to provide safeguards against the growing economic insecurity of the individual resulting from the shift from a predominantly agricultural civilization, built up largely on the basis of a domestic economy, to an interdependent organization of industry and commerce through which income is obtained largely in the form of money wages, and in which wide fluctuations of activity and other factors make increasingly difficult the securing of the individual against the hazards of old-age, unemployment, or dependency from other cause.

Under the President's Reorganization Plan No. I, effective July 1, 1939, the Board functions as a part of the Federal Security Agency, under the direction and supervision of the Federal Security Administrator; and to its duties under the Social Security Act is added administration of the Wagner-Peyser Act, also de-

Reorganization Act of 1939 (Pub., No. 19, 76th Cong.).
Reorganization Plan No. I.
Wagner-Peyser Act (Pub., No. 30, 73d Cong.).

signed to aid in meeting the problems of unemployment by assisting in providing machinery to put the unemployed worker in contact with available jobs.

Brief General Statement of Functions

General Functions.—Under title II of the act the Board has responsibility for maintaining and administering a Nation-wide Federal old-age and survivors insurance system. This system provides for monthly benefits after age 65 for workers in covered employments (in general, industry and trade) who are otherwise qualified under the law, and to their wives or widows and dependent children, or under certain conditions to their surviving dependent parents. Payment of monthly benefits under the system began in 1940.

The Board approves State unemployment compensation laws which meet the basic standards laid down in title III of the Social Security Act, and certifies to the States with approved plans grants covering proper costs of administering their unemployment compensation systems. Under the Wagner-Peyser Act it assists in the maintenance of a national system of public employment offices, makes grants-in-aid to assist in the maintenance of State and local employment offices, and operates a veterans' and a farm labor placement service

and a public employment service for the District of Columbia.

Under the public assistance provisions, titles I, IV, and X of the act, the Board administers provisions for grants-in-aid to States with approved plans for old-age assistance, aid to dependent children, and aid to the needy blind.

In addition to these operating functions, the Board is charged with the responsibility of studying and making recommendations as to the most effective methods of providing in general for economic security through social insurance.

Specific Programs and Procedures.—The administration of title II of the act involves primarily adjudication of claims for the old-age and survivors' benefits provided by the amended title, and maintenance of the wage records upon which determination of the benefits payable is based. Through its representatives in the 12 regional and more than 300 local field offices of the Board throughout the country, the Bureau of Old-Age and Survivors' Insurance maintains contact with the public and provides information to workers and employers as to their rights and obligations under the title; advises interested parties concerning the preparation and presentation of claims; and receives and collects evidence upon filed claims for transmission and adjudication in Washington.

In order to determine the amount of benefits payable, the Bureau maintains records of all wages earned by any individual in employments covered by title II. These records are established from quarterly reports of earnings submitted by employers to the Bureau of Internal Revenue of the Treasury Department. It is estimated that ultimately records will be kept for a substantial portion of the entire adult population.

The Bureau of Old-Age and Survivors' Insurance also conducts such studies as are necessary to its functions in administering title II, including analyses of the age, race, and sex composition of the covered population, average recorded earnings, etc.

With respect to unemployment compensation, the Social Security Act is essentially an enabling statute, designed to facilitate the enactment and administration of unemployment compensation laws by the States. States desiring to provide compensation for involuntary unemployment pass laws suited to local conditions and problems. If these laws meet certain basic standards set forth in the Federal unemployment compensation legislation they are approved by the Social Security Board. States having approved laws receive grants from the Federal Government covering proper costs of administering their unemployment compensation systems, and employers in such States are entitled to deduct from their Federal unemployment compensation taxes amounts up to 90 percent thereof, on account of the

requirements of State laws with respect to contributions to State unemployment compensation funds.

Upon determination by the Board of the eligibility of the States to receive administrative grants the Board analyzes estimates of administrative expenses submitted by them and certifies to the Treasury the amounts of the grants which are approved for payment. When requested, the Board gives technical aid to the States in drafting or amending unemployment compensation legislation. It cooperates with State administrative agencies in working out methods and procedures for the administration of State unemployment compensation laws with respect to such matters as accounts and records, personnel requirements and training, development of benefit claims procedures, etc.; and in studying such technical problems as experience rating for employers and labor turn-over and mobility.

Under the Wagner-Peyser Act the Board also makes grants-in-aid of Federal funds for State and local public employment offices to match State and local funds made available for that purpose. It assists in coordinating the public employment offices throughout the country and in increasing their usefulness by developing and prescribing minimum standards of efficiency, promoting uniformity in their administrative and statistical procedures, furnishing and publishing information as to opportunities for employment, and other information of value in the operation of the system. There are also operated special services to aid veterans and farm workers to obtain employment, and a public employment service for the District of Columbia.

Pursuant to the public assistance titles (I, IV, and X) of the Social Security Act the Board administers provisions for grants by the Federal Government to States for (1) old-age assistance, (2) aid to dependent children, and (3) aid to the needy blind. The act provides a cooperative Federal-State relationship for all three of these public assistance programs based upon State-initiated and State-administered plans for each type of assistance. States with plans approved by the Board as meeting certain specified requirements set up by the amended act receive from the Federal Government one-half of any amount expended by the State and its political subdivisions for assistance up to a maximum Federal-State total, beginning January 1, 1940, of \$40 a month for each needy, aged, or blind individual, \$18 a month for the first dependent child, and \$12 for each additional dependent child in the same home. To States with approved plans for old-age assistance the Federal Government also makes supplementary grants amounting to 5 percent of the Federal grant for assistance payments to needy individuals, which the States may use to meet part of the administrative cost of this program or for additional assistance, or both. The Federal Government also grants to

States with approved plans for aid to dependent children and aid to the blind, effective January 1, 1940, one-half of the State and local administrative costs of these programs.

The Board reviews the operation of State public assistance plans in order to determine their continuing conformity to the Federal act, and certifies to the Treasury the amount of Federal grants to be paid to the States. It consults with the States concerning technical problems involved in the administration of public assistance, and is continuously engaged in the analysis and development of standards and procedures applicable to such administration. The Board also acts as a clearing house for information regarding public assistance administration gathered from the various States as the result of their experience in the operation of their own plans.

In addition to these operating activities, the Board collects various statistics and conducts research with respect to the different programs which it administers.

Activities Affecting and Assistance to Local Planning

There is little in the actual operating activities of the Social Security Board which deals directly with the problems of local planning. Field offices are maintained in more than 400 localities throughout the country, but these are primarily concerned with rendering service to individuals covered by the old-age and survivors insurance provisions of the act. These services include the assignment of account numbers, completion of wage records, development of claims for benefits, and supplying general information concerning rights and obligations under the act. Public assistance and employment security activities are conducted on a Federal-State cooperative basis. Thus, while much of the work of the Board in these fields, especially that concerned with the development of effective methods for administration of the State programs, does affect significantly the local agencies concerned in the programs, the connection is through the medium of the State agencies rather than with the local agencies direct. In certain circumstances, however, local communities may obtain, through State agencies, the direct aid of Federal experts in dealing with specific community problems such as those affecting employment and the local labor market.

The research activities of the Board, on the other hand, and its statistical compilations—also conducted largely in cooperation with the State agencies—are productive of various materials which may have bearing upon the problems of local planning. These are outlined in the following section.

Local Planning Data and Information Available

1. *Publications*.—Publications on the Social Security Act. SSB Publication No. 12.

Some Basic Readings in Social Security. SSB Publication No. 23.

Social Security Bulletin. Containing lists of recent publications in the field of social security, and of statistical bulletins and reports by State public welfare agencies. The bulletin also carries current monthly tabulations of statistics compiled by the Board, and numerous special articles, some of which relate to work done in local fields. Superintendent of Documents, Washington, D. C. 20¢ copy. \$2 per year.

Beginning with 1940 there is being issued as an annual supplement to the "Social Security Bulletin" a Social Security Year Book, containing information on economic and social problems pertaining to the social security program. The plans for the Year Book do not at present call for breakdown of data below the State level.

2. *Planning Information, Research Materials, etc.*—Public Assistance and Related Programs. Since February 1936, county information has been received monthly on the number of individuals receiving old-age assistance, aid to dependent children, and aid to the blind, obligations incurred for these types of aid, and the average payment per recipient from all State agencies receiving Federal funds for these programs under the Social Security Act. Most States also report voluntarily information relative to local units on the number of cases and number of persons receiving general relief, the amount of obligations incurred, and the average payment per case.

These data relative to local units have been published as follows:

Data for March 1936—Supplement to Public Assistance—Quarterly Review of Statistics for United States. March 1936, Vol. 1, No. 1.

Data for June 1936—Supplement to Public Assistance—Quarterly Review of Statistics for the United States. June, 1936, Vol. 1, No. 2.

Data for September 1936—Supplement to Public Assistance—Quarterly Review of Statistics for the United States. September, 1936, Vol. 3, No. 3.

Data for December 1937—Tabular Summary of Statistics of Public Assistance under the Social Security Act for the Calendar Year, 1937. Bureau Report No. 1, Bureau of Research and Statistics, Social Security Board.

Data for December 1939—Trends in Public Assistance, 1933-39—also contains data on general relief. (Being prepared for publication as Bureau Report No. 8, Bureau of Research and Statistics, Social Security Board.)

From July 1937 through June 1938, all State agencies receiving Federal funds for old-age assistance, aid to dependent children, and aid to the blind under the Social Security Act submitted quarterly reports, containing data by counties, on source of funds for payments to recipients of these types of aid. Monthly reports, by counties, on source of funds for the total general relief program were received on a voluntary basis from some States from April 1937 through December 1938; for prior periods this information was submitted to the Works Progress Administration.

From July 1938 to date some States have reported voluntarily data on source of funds for assistance payments for general relief for counties containing a city with a population of 100,000 or over, or if there are no cities of this size in the State, for the

county containing the largest city in the State. No county detail has yet been published by the Social Security Board.

From July 1936 to date information has been received monthly from public and private welfare agencies in 116 urban areas on the number of cases receiving general relief, old-age assistance, aid to dependent children, aid to the blind, and aid to service and ex-service men and their families, and on the amount of obligations incurred from public funds and private funds for these types of aid. For prior periods this information was reported to the United States Children's Bureau. The information on amount of obligations incurred is published monthly, by areas, in the Public Assistance section of the Social Security Bulletin. Yearly summaries showing total expenditures and amount expended per inhabitant for each of the urban areas have been published in the Public Assistance section of the Social Security Bulletin for each year of the period 1936-39.

Bureau Report No. 7, Bureau of Research and Statistics, Social Security Board, Public and Private Aid in 116 Urban Areas During the Period 1929-33.—This document, which is being prepared for publication, will comprise a record of public and private relief extending over a longer period of time than any other comprehensive series of relief statistics. It brings together in revised form data heretofore published by the Children's Bureau of the United States Department of Labor and by the Social Security Board. This report discusses trends in public and private aid against the background of depression and unemployment; describes the character and development of the assistance and work programs and traces underlying shifts in the relief structure. The diversity in local trends, patterns of aid, and in local relief burdens, is also treated. In addition, tabulations and charts showing the trend of relief in each urban area are included. A supplement containing data for 1939 is included in the document, and it is expected that annual supplements will be issued each year hereafter.

Monthly reports on general relief operations have been submitted voluntarily since January 1933 by the public agencies administering general relief in 18 large cities. Information is obtained on formal applications, cases under care, the amount of relief received, the number of cases in households also receiving other types of public aid, and reasons for opening and closing cases. Information is published monthly in the Public Assistance section of the Social Security Bulletin on the number of cases receiving relief, the amount of relief, the average amounts per family and single-person cases, the proportion of general relief cases in households receiving other types of income or assistance, and the reasons for opening and closing cases.

Bureau Memorandum No. 41, Bureau of Research and Statistics, Social Security Board, General Relief Operations of Public Agencies in Selected Large Cities.—An 18 months' summary of general relief operations of the public agencies in selected large cities has been published. The material includes tables presenting comparative statistics by months for the period January 1933 through June 1939 and a brief text discussion. Data are presented on cases aided and obligations incurred, average amount per family and per single-person case and percent of single-person cases in the case load, turn-over in the case load, openings and closings for specified reasons, and the extent to which the relief load consists of cases receiving other assistance or income.

Information was received monthly by the Social Security Board from July 1937 through June 1939 from public and private welfare agencies in 395 rural and town areas on the number of cases receiving old-age assistance, aid to dependent children, aid to the blind, general relief, aid to service and ex-service men and their families, subsistence payments to farmers, and on the amount of obligations incurred from public and private funds; for prior periods this information was submitted to the

Works Progress Administration. This series was discontinued as of June 30, 1939. No county detail has been published by the Social Security Board.

Since November 1936 a social-data card has been filed for each individual accepted for old-age assistance and aid to the blind, and for each family accepted for aid to dependent children, and for each case closed in States receiving Federal funds for these types of aid. The individual cards are retained by the State agency, which submits the information in summarized form in an annual report to the Social Security Board. No county detail is available in the Social Security Board, but most State public welfare agencies have tabulated this information by counties and some have published data by counties.

A study of State and local organization for the administration of general relief as of January 1940 is now being made. Information for this study is being obtained from the State agencies by the field staff of the Board's Division of Public Assistance Research. Up to the present, data have been received for 34 States, and analysis of material for each State has been made available to the office of the respective State agency. Aspects of administration covered by the study include: Organization at the State and local levels, supervision by State agencies, sources of funds, methods of apportioning State funds among local units, methods of selecting personnel, policies and standards, and the relationship of the general relief function to other welfare activities.

Studies are in progress for each of a number of cities covering economic and social data originally recorded in the National Health Survey (1935-39), subsequently tabulated under the supervision of the Social Security Board as a part of the so-called Family Composition Study. Information for each family study covered such items as: family size, age data, family income, occupational data, and family relationships. The first of these studies is expected to be issued at an early date.

Employment Security.—The nature of the relationship between the Federal and State governments in the administration of employment security is such as to concentrate practically all data relating to local areas in the State agency. Almost all of the information available in Washington on employment security activities is on a State-wide basis. In the State agencies, there is a considerable volume of information on areas within the State which would have value in local planning in those fields where the industrial characteristics of an area are requisite to any comprehensive program. Under all State procedures, employers have been assigned numbers which identify not only the particular business activity in which they are engaged, but also the areas in which those business activities are located or operated. Through these means of identification, it is possible to secure various kinds of information on cities, counties, or sections of the State from the basic records of the State unemployment compensation agencies. The basic records most pertinent to local planning are (1) wage records, (2) contribution reports, and (3) claims for benefits.

One of the major sources of information is to be found in the wage records of individual workers who have been engaged in employment covered by the State law. These records are essential in the operation of the unemployment compensation system, since they furnish the agencies with the means of determining the amount and duration of benefits to which claimants are entitled. From these records there could be obtained, in addition to the data showing the earning capacity of individual workers, some evidence of intrastate migration and rough indications of employment duration and loss of earnings due to unemployment. Evidence on intrastate migration, for example, can be secured by observing the location of employment of workers who earn wages from more than one employer.

Another basic record used by all State agencies is the contribution report which employers submit periodically (either monthly or quarterly, according to State regulations). The employer is required to furnish on this report data on the amount of wages paid or payable to workers in his employ. Because the number of covered workers generally comprises the bulk of the working population in most areas, income data of such workers afford a basis for estimating aggregate income of the areas, at least with respect to salaries and wages. Such information will be extremely valuable from the standpoint of taxation policy. In addition to wages, employers also report on employment of covered workers as of the last pay periods ending within the month. This information is highly useful for following developments in the trends and levels of employment. As indicated earlier, these significant economic data can be classified according to industry groups as well as areas, so that the industrial character of an area can be readily determined. To cite another obvious use for these data from the viewpoint of local planning, these materials should indicate over a period of time those industries which are expanding and those which are contracting.

Because of the limited experience of unemployment compensation in this country, there is at present little published material which explores State experience in terms of local communities. State unemployment compensation agencies, however, frequently issue reports covering operations within the State which indicate the kind of material available from the State system. For example, the monthly or quarterly publications of the State agencies contain a considerable amount of local office data. Annual reports of the agencies also frequently contain much information on a county basis. Much of the information useful to local planning, however, is contained in records rather than in publications at the present time. As the system matures, this information will undoubtedly be made available in published form.

From the benefit and placement operations of the State unemployment compensation and placement services, voluminous materials can be obtained on various aspects of local labor markets: General trends in the volume of unemployment or, put in another way, the demand for jobs is reflected by the claims and registration activities of the local offices. Registrants for jobs and claimants for benefits can be identified not only according to the industry from which they were separated but also according to their occupations and skills. Since registration by the unemployed in the local employment offices is voluntary, the active files of these offices cannot be said to contain an absolutely complete picture of the unemployed population of the communities which the offices serve. Nevertheless, the information contained in these files should in most instances be sufficient to provide a substantially sound indication of the characteristics of the unemployed in the respective communities, and therefore be of considerable use in a local planning program.

Vocational guidance and training has also received considerable attention from local communities and in this connection information from the public employment offices can be used in many ways. The materials on occupations and skills of the unemployed, as well as the placement data showing the occupations of those workers being placed and the industries which are absorbing workers, afford information basic to any long-range approach to the problem of directing new entrants into the labor market into industries which are expanding and shifting older workers away from industries in which employment opportunities are contracting.

Research studies on the characteristics of local labor markets have been made in certain areas and the results of these studies

can be used in several ways. The types of jobs, skills, occupations, and prevailing wage rates, for example, are data which are needed by entrepreneurs in locating new businesses. Governmental activities, such as local housing projects, frequently require this information before any program can be devised. Community research centers were conducted in Baltimore, Dallas, Providence, and St. Louis from January 1938 to June 1939. Current information regarding the supply of and demand for labor was collected in these communities and estimates prepared of future trends. Studies were made of important local industries and issued in the form of monographs for use especially in the guidance of young people in the choice of a vocation.

As previously indicated, available data relating to employment security on a local basis are to be sought primarily in the State agencies. Some of the more general references currently available are listed below:

Twelve and a Half Million Registered for Work, 98 pp., 1934.
Filling Nine Million Jobs, 149 pp., 1937.

Survey of Employment Service Information, 200 pp., 1937.

Survey of Employment Service Information, 142 pp., 1938.

Survey of Employment Service Information, 153 pp., 1939.

Employment and Pay Rolls in State Unemployment Compensation Systems, issued in 1940 in two parts, comprehensive tables and text. (Bureau Memorandum No. 6, Bureau of Employment Security.)

Selected List of References on Public Employment Offices, 1935, Supplement 1940.

Old-Age and Survivors Insurance.—Statistical data available from this program are (1) those relating to applicants for account numbers, (2) those derived from records of wages and employment, and (3) those relating to payments of claims for benefits. Since this program is entirely Federally operated, all these data are prepared by the Social Security Board.

With respect to applicants for account numbers, tabulations are available showing the distribution by age, color, and sex, for each State, of applicants recorded during the 14 months prior to January 1, 1938, for the calendar year 1938, and for 1939.

Wage and employment data for individuals in covered industry for whom wages and employment were reported for the year 1937 have been tabulated by States. These tabulations show wages and employees in covered industries by age, color, and sex. Similar tabulations for the calendar year 1938 are completed and will be available for distribution about August 1940. Quarterly tabulations, by States, of employment and pay rolls as reported by employers in covered industries in 1939 will be available about the same date.

With respect to claims for payments under the original act, tables are available showing by States the distribution of claims received and awarded each month, subdivided between those resulting from the death of the wage earner and those resulting from the wage earner's attainment of age 65. The amount of the payment certified to the Treasury is shown for all claims awarded.

Under the 1939 amendments to the act, it is anticipated that data will be available showing by States the number and amount of the various classes of benefits awarded or in force, the characteristics of these wage earners and their dependents or survivors, and the numbers of each of the various classes of benefits terminated, suspended, or reinstated according to the reasons for such actions and the characteristics of the beneficiaries.

Much of the available data outlined above have been published from time to time in issues of the Social Security Bulletin, and future data considered to be of sufficient interest will be similarly published. Information relating to other data not so published may be obtained from the Bureau of Old-Age and Survivors Insurance, Social Security Board.

U. S. PUBLIC HEALTH SERVICE

Marine Hospital Service Act of 1798.
Act of July 1, 1902 (32 Stat. 712).
Title VI of the Social Security Act.

National Cancer Institute Act of 1937.
Venereal Disease Control Act of 1938.
Amendments to Venereal Disease Control Act of 1938.

General Introductory Statement

The Public Health Service was founded as the Marine Hospital Service in 1798 by act of Congress as a bureau of the Treasury Department. In 1911 the name was changed to the United States Public Health Service. In July 1939 the Public Health Service was transferred by Executive order and act of Congress to the Federal Security Agency. Since its foundation, 141 years ago, many additional duties and functions having to do with the health of the public have been delegated to the Public Health Service by acts of Congress. Its affairs are administered by the Surgeon General. Aiding him are Assistant Surgeons General in charge of the various administrative divisions.

Brief General Statement of Functions

In general, the functions of the Public Health Service are:

1. Medical care for certain legal Federal beneficiaries.
2. Medical examination of immigrants and arriving aliens.
3. Foreign quarantine for the prevention of the introduction of diseases from foreign countries.
4. Research—investigations of diseases and matters pertaining to the public health.
5. States relations—including prevention of interstate spread of diseases: Consultation service to the States in the planning and organization of facilities for the extension of health services; cooperation with the States in preventing the spread of epidemic diseases; allocation of funds provided by the Social Security Act for the purpose of assisting States, counties, and other political subdivisions of the States in establishing and maintaining adequate public health services, including the training of personnel.
6. Control of venereal diseases—including research: Grants-in-aid to the States for the control of venereal diseases as provided by the Venereal Disease Control Act to include training of personnel, and advisory service to State and local health departments for the organization and expansion of venereal-disease-control activities.
7. Publications—compilation and publication of data relating to the prevalence of diseases in the United States and foreign countries, and publication of results of scientific investigations and articles relating to health and sanitation.

Activities Affecting and Assistance for Local Planning

The activities of the Public Health Service that relate to the planning and development of local health services are carried on by the State health agency in cooperation with the Public Health Service or directly by the Service on request of the State agency. The nature and extent of these activities are as follows:

1. *Investigation* of matters pertaining to the public health. This will include the definition of public-health problems, the evaluation and perfection of public-health procedures relating to child hygiene, nursing service, stream pollution, public-health records, environmental and food sanitation, health facilities, and the control of heart disease, pneumonia, tuberculosis, cancer, and venereal disease. These investigations and studies are made by the Division of Public Health Methods. Reports of this division are published from time to time in the Public Health Service publications.

2. *Consultation* service to the States in the planning and organization of facilities for the extension of public-health services. This cooperative service is offered to State and local health departments through five district offices. The personnel of each district office consists of a director, a medical consultant, and special consultants in sanitation, venereal-disease control, and public-health nursing. In addition to the consultation services offered through the district offices, the States Relations Division provides special consultation service direct from Washington in the following fields:

(1) Industrial hygiene, (2) public-health education, (3) malaria control, (4) nutrition, (5) dental hygiene, (6) laboratory methods, (7) pneumonia control, (8) cancer control, and (9) assistance to States in the evaluation of their health services through surveys.

3. *Grants-in-aid*.—Under the provisions of title VI of the Social Security Act the Surgeon General of the Public Health Service allots federal funds to the States for the purpose of assisting State, county, and other political subdivisions of the State in establishing and maintaining adequate public-health service, including the training of personnel.

The program of local health departments which may be developed or aided through use of Federal funds usually include the following activities:

(1) Communicable disease control, including home visits to cases, immunization, maintenance of diagnostic

clinics for tuberculosis, and facilities for treatment of venereal diseases among the indigent.

(2) Maternity service, including home visits to expectant mothers and the maintenance of maternity clinics for the poor.

(3) Infant and pre-school health service, including the maintenance of clinics for examination and advice on the care of infants.

(4) School hygiene, including inspection and examination of school children, dental health work, and health education.

(5) Diagnostic laboratory service for communicable diseases.

(6) Environmental sanitation, including protection of water supplies, safeguarding excreta disposal, sanitary control of milk supplies, sanitation of food-handling establishments, and mosquito control.

(7) Public health education, including home conferences, public lectures, newspaper articles, moving pictures, literature, exhibits, and instruction in schools.

The work done within the States under the public health title of the act is not performed directly by the Public Health Service, but is carried out by and administered under the supervision of the State and local health authorities, under the authority of State and local laws and regulations, in the same manner as the regular activities of such authorities have been performed heretofore. All persons employed on the work within the States and local communities are State or local employees, selected, appointed, and paid by the State or local authorities.

Allotments: Responsibility for allotment of the annual appropriation for grants to the States is placed upon the Surgeon General of the Public Health Service. In making the allotments to the States, however, the Surgeon General must take into account certain major factors; namely, the relationship of the population of each State to the total population of the United States as a whole; the financial needs of certain States, or the inability of States to meet their health problems without financial assistance; and special health problems imposing unusual burdens upon certain States. The weighting and application of these factors in the distribution of the fund are left to the discretion of the Surgeon General.

4. Control of venereal diseases.—Because of the high prevalence of this special health problem and the limited funds appropriated, many State health departments have been unable to cope with the problem. The

Venereal Disease Control Act of 1938 established a movement to control venereal disease on a permanent national basis.

The administrative control of these diseases is carried on in the State and local health departments as are other health problems. Federal grants to the States will equalize to some extent the distribution of funds for the control of syphilis and gonorrhea and will enable less wealthy States to establish more effective control measures.

These grants-in-aid are allotted to the States in the same general manner as are the allotments from title VI of the Social Security Act for the establishment of public health services. In addition to the grants, the Public Health Service conducts a venereal disease research laboratory for basic scientific investigations, conducts field studies on the prevalence of these diseases and studies of diagnostic methods and the efficacy of certain therapeutic agents.

Trained officers of the Public Health Service are assigned temporarily to States and cities for the organization and development of venereal disease control activities.

5. The Division of Marine Hospitals and Relief has built some 30 hospitals for marine Federal beneficiaries with funds appropriated by Congress for the purpose. The selection of the sites, design of the buildings, and subsequent administration is conducted by the United States Public Health Service.

6. *Compilation and publication and dissemination of public health information.* The Public Health Service, through the Division of Sanitary Reports and Statistics, acts as a clearing house for public health information. This Division prepares data on the outbreaks and prevalence of diseases, the results of scientific investigations, and articles relating to health and sanitation.

Local Planning Data and Information Available

(1) For health and medical officials, departments of health, and medical libraries: Annual report of the Surgeon General; Public Health Reports (weekly), The Health Officer (Monthly), Reprints and supplements from Public Health Reports, and Public Health Bulletins,

(2) For the public: Miscellaneous reprints and pamphlets on health matters such as The Common Cold, Personal Hygiene, Tuberculosis, Care of the Teeth, etc.

FEDERAL WORKS AGENCY

PUBLIC BUILDINGS ADMINISTRATION

Executive Order No. 6166 (Pursuant to Act of 1933—47 Stat. 1517).

Reorganization Plan No. 1, April 25, 1939.

Brief General Statement of Agency Functions

The Public Buildings Administration is charged with (1) the construction of new Federal buildings, exclusive of facilities for the Army and Navy and the Veterans' Administration; (2) the repair and preservation of buildings which it has constructed; (3) the operation and protection of practically all existing buildings in Washington and numerous buildings elsewhere; (4) the allocation of space in existing departmental and general service buildings; and (5) the custody of surplus Federal real estate wherever located. In the performance of its functions with respect to new construction, the Public Buildings Administration is authorized to undertake the construction of specific projects. In the case of general building programs, the Administration is empowered to allocate, in collaboration with the Postmaster General, proposed buildings so selected as to result in their equitable distribution throughout the Nation.

With respect to those activities of the Public Buildings Administration which relate to local and national planning, the Administration is in effect a large Federal architectural and engineering organization. In conformity with applicable construction programs, it acquires necessary land by purchase, condemnation, or by other means; makes all designs, working drawings, and specifications for respective projects; and supervises all construction operations. The facilities of the Administration and the services of its professional personnel are available, in accordance with existing legislation, to all other agencies of Government upon request.

Subject to certain statutory limitations, the Public Buildings Administration determines the priority of construction of all proposed Federal buildings in the District of Columbia and selects sites for these buildings, subject to final approval by the National Capital Park and Planning Commission.

It is the policy of the Public Buildings Administration to plan building allocations and architectural development, insofar as possible, with relation to existing local plans and traditions.

The construction of new buildings is predicated upon appropriations voted by the Congress. Funds for specific projects are available only for the designated proj-

ects. Appropriations for general construction programs are available for projects selected by a joint committee composed of representatives of the Postmaster General and of the Administration on behalf of the Federal Works Administrator. Periodical reports concerning general construction programs are made to the Congress. Subsequent to a decision to construct specific structures, the procedure embraces the selection and acquisition of sites, a determination of space requirements, the preparation of drawings and specifications, and supervision of construction operations. The types of projects undertaken by the Public Buildings Administration involve structures for many purposes, including departmental buildings, post offices, hospitals, office buildings, customhouses, penal institutions, and airports. Post offices have been built in larger numbers than any other single type of building. No post office may be constructed in a community not having a first-class or second-class post office.

Activities Affecting and Assistance to Local Planning

The activities of the Public Buildings Administration affect local planning in that each Federal building influences the development of the city or town in which it is located. In smaller towns especially, the locations of post offices and of other public buildings exert considerable effect upon community and business centers, and indirectly, to a lesser degree, influence the growth of the town as a whole. Federal buildings, particularly post offices, are often designed to perform particular functions, so that the sites selected for them are largely influenced by their respective specific needs. In larger centers, and often in smaller communities, it is found desirable to construct new buildings upon the sites previously occupied by older buildings, which are either demolished or remodeled and incorporated into the new buildings. Since 1933 the Administration has completed 1,763 buildings throughout the Nation.

From August 1935 through June 1940, 136 parcels of land, involving \$4,720,983, were disposed of—irrespective of land for the Army and Navy. As of July 1, 1940, 129 parcels of land, with an estimated value of \$27,544,978, were available for disposition. From August 1935 through June 1940, the entrustment of 106 properties, representing \$3,553,213, was made to other Federal agencies for further use.

The members of the staff of the Public Buildings Administration are available for consultation in Washington with representatives of local planning bodies interested in matters relating to Federal building projects. Consultation can be made available to planning bodies outside of Washington when proper arrangements have been made. In practice, the usual task of the Administration is to develop architectural designs in harmony and consistent with local plans insofar as conditions permit; or, if local plans are nonexistent, to anticipate, insofar as possible, the subsequent adoption of such plans. There are, however, no regularly established facilities which offer much of constructive information to bodies engaged in local planning.

Local Planning Data and Information Available

The Public Buildings Administration has a record of every Federal building, which includes for each building data concerning location, initial cost, and subsequent costs of repair, preservation, and alterations.

The Administration is charged with the maintenance of records of the 3-year survey of the Federal Real Estate Board, which are intended to show and describe briefly all land owned by the Federal Government. The Administration also maintains a list of all surplus Federal real estate available for transfer, lease, or sale; and exercises jurisdiction over these properties.

PUBLIC ROADS ADMINISTRATION

Federal Aid Road Act of 1916; and Amendments.

Brief General Statement of Agency Functions

The major function of the Public Roads Administration is to administer, jointly with the State highway departments, the Federal-aid program, which began in 1916.

The Administration constructs the principal roads in the national forests; cooperates with the National Park Service in the construction of parkways and main roads in the national parks; constructs roads through public lands; administers funds for the restoration of flood-damaged roads and bridges; and cooperates with the Central American countries in surveying and constructing the proposed inter-American highway.

The Public Roads Administration has for the past several years been handling large emergency funds for highway and grade-crossing work. These emergency funds, the first of which were authorized in 1930, have been outright grants to the States for the primary purpose of providing employment. Practically all such funds have now been expended. Other emergency work which the administration has been conducting includes: (1) Work-relief highway projects, begun in the fall of 1933 to relieve distress in particular drought and flood areas; (2) loan and grant highway projects, transferred from the Federal Emergency Administration of Public Works; and (3) the repair and construction of roads and bridges damaged by floods in 1936, with funds provided by the Work Projects Administration.

The Public Roads Administration conducts a comprehensive program of highway research, both independently and in cooperation with State highway departments. Physical problems involving the characteristics of road materials and their behavior in the road, and problems associated with the forces of traffic

and climate which affect the road structure and its design, are investigated by the Division of Tests.

The Division of Highway Transport studies the road as a transportation facility and deals with the problems of finance and economics which bear upon the cost of roads to the public and the return in the form of reduced operating costs. The Division of Control collects and reports on considerable statistical data on highways, of importance to highway research, but is not itself a research division. It keeps complete records of all past and present work, and collects data regarding highway finance and motor vehicle registration. The Division of Highway Laws and Contracts, in addition to its advisory functions with respect to Administration activities, makes studies concerning Federal and State highway legislation. The Division of Design and the Division of Construction are reviewing and approving divisions concerned with initial plans, construction progress, the completed projects, and maintenance; and the Division of Information is the agency through which information is disseminated to the public.

It is the policy of the Public Roads Administration to consider the highway program in conjunction with land planning, land acquisition, rural and urban zoning, and other related factors. Through the withholding of highway improvements in areas unsuited for agriculture, and by assisting the development of true agricultural communities through the provision of favorable highway facilities, it is sometimes the policy of the Administration to discourage continued use of submarginal lands and to further in no small degree the program of agricultural readjustment.

Generally speaking, the interest of the Administration in highway planning and consequently in land-use planning is much broader than the restricted mileage

of Federal-aid primary and secondary roads. There is interest in complete and integrated programs of highway development, and it is expected that the data and surveys of the Administration will be used by the State highway departments and the local planning agencies in the preparation of such programs.

In addition to the progressive continuance of its functional duties outlined above and related activities, the Public Roads Administration is conducting in cooperation with all State highway departments a series of related, continuing, fact-finding surveys designed to provide a basis for planning an adequate, economically and socially defensible, integrated highway system. This program includes:

1. The taking of the first complete Road Inventory of all rural public roads involving an Automobile Log of every public road, a Roads Hazard Inventory, Grade Crossings Study, and Culture Data Record to be assembled into complete transportation maps of States and counties.

2. The conducting of Traffic Studies determining the volume, type, and distribution of traffic on all public road systems.

3. Financial Studies analyzing the sources of funds, the place and purpose of expenditures, the costs of highways, and the direct use benefits to the traveling public.

4. Road Capacity, Vehicle Performance and Safety Studies to determine the most efficient and economical highway design principles to insure expeditious movement of traffic with the maximum of safety.

5. Special studies by the staff of the Public Roads Administration to determine and demonstrate the interpretation and application of this survey data.

A number of special studies have been recommended to the States to round out the work carried on under the planning surveys and to provide special information important to the solution of many of the problems. These include special origin and destination studies, a study of motor-vehicle accidents as they are influenced by highway design and construction, studies of highway capacities and vehicle performances, and a study of excess condemnation in connection with highway right-of-way problems. The detailed data collected in the planning surveys have expedited exhaustive studies and plans for national defense highways.

The procedure of administering the Federal-aid system of highways involves a number of considerations.

1. Each State, to share in the appropriation, has had to establish a State highway department adequate in the opinion of the Administrator of the Federal Works Agency to cooperate with him in the administration of the improvements provided for.

2. The apportionment of the Federal authorization among the States—one-third in proportion to area, one-

third in proportion to population, and one-third in proportion to road mileage.

3. The designation of a system of important interstate and intercounty roads recommended by the State highway departments and approved by the Administrator of the Federal Works Agency. This system, initially limited to 7 percent of the total road mileage, constitutes the Federal-aid highway system. The concentration of Federal appropriations on this system has prevented a wide dispersion of funds upon projects which would not assure the completion of connected arteries within a reasonable time.

4. The general limitation of the Federal share in each project to 50 percent of the cost and the States matching the Federal share with funds directly under the control of their highway departments. In States where more than 5 percent of the area is Federally owned public land the Federal share is increased above 50 percent by an amount equal to one-half the percentage of the total area represented by unappropriated public land. Each year the highway department submits a program of proposed projects, the cost amounting to the allocation to the State, plus the State's matching share. Upon approval of the program, the highway department submits detailed plans and specifications and is then authorized to proceed with the construction of individual projects.

5. The requirement that the States assume the maintenance of completed projects.

6. The designation of the Administrator of the Federal Works Agency as the final authority to determine the adequacy of improvements and of maintenance, and to grant or withhold Federal Aid accordingly.

Federal Aid for secondary roads is administered under the same general plan as that used in improving the Federal-aid system. This applies also to the grade crossing funds except matching is not required and use of the funds is not limited to any particular system.

Activities Affecting and Assistance to Local Planning

Federal aids and activities relating to State highway systems were centered on the improvement of the Federal-aid system outside of cities until 1933 when, as an emergency measure, the program was broadened to include extension of the system into and through cities, improvement of secondary roads, and the elimination of hazards at grade crossings. This broadened policy has been continued in subsequent Federal-aid authorizations.

Of particular interest to local planning is the Administration's research work in highway economics and highway planning. Surveys of traffic and transportation, conducted during the past 14 years in cooperation with the State highway departments, have developed information upon which to base progressive plans of

highway improvement, and at the same time have contributed to the general knowledge of the subject. Under the provision of the Hayden-Cartwright Act of 1934, which authorized the use of 1½ percent of the Federal-aid highway funds for surveys, the highway departments of all States are cooperating with the Public Roads Administration in a series of comprehensive highway planning surveys.

The primary objective of the surveys is to provide the facts needed in developing and maintaining an adequate national highway system. These facts include (a) the present extent and condition of all our rural roads; (b) the service rendered by the various parts of the road system; (c) the relation of road costs to the benefits obtained by the road users; and (d) means by which the continuing cost of an adequate highway system can be met.

These highway planning surveys constitute a continuing function of each State highway department and the Public Roads Administration. Intensive studies form the basis of a program of work to be accomplished within a definite period, but the data obtained in them must be kept up-to-date by continued studies from year to year.

The present extent and condition of the roads is measured in a rural road inventory. Records are made of the length, width, type, and condition of the surface of all rural roads; dimensions and condition of structures such as bridges; the location and type of dwellings, stores, and other culture along the roadside; and the location, type, and condition of crossings, whether at grade or separated. Insufficient sight distances, excessive grades, and inadequate superelevation on main roads are noted. Special studies of railroad grade crossings both in cities and on rural roads are made in order to determine the priority of grade crossing elimination projects. All these data are plotted on maps and summarized in statistical tables.

The service rendered by the various parts of the road system is determined by means of traffic surveys, including traffic counts, weighing of vehicles, studies of origin and destination, and loading practice studies. The data obtained at the counting stations include registration numbers, the nature of the commodity or the number of passengers transported, the weight of the load, the origin and the destination, and the origin and destination classification, such as farm to railroad or factory to retailer.

Origin-and-destination studies or private-car movements are made at some stations. Additional studies of this type assist in determining the value of or necessity for bypass routes around congested areas. The purpose of the studies being conducted at weighing stations is to determine what loading practices are

actually followed and found most economical by haulers, with relation to the fact that many State laws restricting the size and weight of vehicles are known to have no scientific basis and that there is a lack of uniformity in laws among the States.

Certain other studies, concerned with the dynamics of highway traffic, have been recently added to the program. They include an investigation of the hill-climbing ability of motor trucks and tractor-truck semi-trailer combinations, studies of the speed of vehicles under various highway conditions, and of highway capacity.

The financial survey is producing most useful data on the relation between road use and the price paid for it by the user, and all-important information which the States and the Federal Government will need in the financing of our future highway programs. The fiscal study analyzes the receipts, expenditures, and debts for all purposes of the State and its subdivisions, and shows the relation of the highway income and expenditure to that for other purposes. The motor-vehicle allocation study, conducted by means of questionnaires addressed to car owners, shows the urban and rural distribution of taxpaying car owners. The road-use study, consisting of personal interviews with representative car owners, arrives at estimates of total yearly travel and gasoline tax payments, and the extent to which each car owner used different types of roads, city streets, main highways, and local roads. The road-life study is an application of the actuarial methods used by life insurance companies, by which the probable life of pavements may be estimated from the pavement-life histories found in highway department records.

One result of the Public Roads Administration's highway planning survey work is a series of large-scale county highway maps, generally at the scale of one inch to the mile, on which are shown all predominant natural characteristics of the terrain, the highways and their type and condition, and all man-made culture such as houses, dams, airports, and any other source or destination of traffic. These maps will provide the base for a series of special maps which show in different ways the service rendered by the highways in each county, such as traffic volume maps, school bus route maps, postal route maps and the like. From the beginning, a land use or area classification map series has been contemplated, which will show the several classes of agricultural land in relation to the highways. The base maps for these have already been completed in a number of States and are in process of completion in the remainder, and arrangements have been made to make them available for the use of the county agricultural agents.

A total of 4,458 standard size sheets will be required for the 3,070 counties. Approximately 80 percent of these maps have been completed to date.

In addition to these county base maps, there are four other series of maps; the general highway and transportation map, the truck and bus map, the rural post roads map, and the school bus map.

State maps are also being prepared at a scale of 8 inches to the mile. These will consist of a series of three maps; the base map, the highway map, and the transportation map. Most States have not yet undertaken the State series.

The results of the traffic survey are in the form of traffic maps, both county and State, and traffic tables showing type of vehicles, local and foreign traffic. County traffic maps are prepared using the general highway and transportation map as the base to which are added bands of varying width, proportional to the traffic volume.

Accident studies involve the comprehensive analysis of accident occurrence on the various types of highways as a means of determining abnormally hazardous highway conditions. Conversely, these studies will provide information on those features of highway design and construction which contribute to a low hazard rating. Information thus developed will be valuable in making needed corrections of dangerous highway conditions as well as serving as a guide for the development of standards of safe design.

The traffic volume at which a two-lane highway should be widened to permit the free flow of traffic varies not only with the type of traffic, but with its fluctuations throughout the year. To arrive at reasonable figures, applicable to average conditions, data are being collected on the speeds of all vehicles using highways of different widths and alignments. The freedom of movement as evidenced by the variation in speeds available to the different units of the traffic stream, provides an index of congestion on which standards may be based.

Elaborate electrical apparatus has been designed to record the movements of all vehicles continuously over half-mile sections of highway. From data collected with these instruments under a wide variety of conditions, standards for sight distances may be established and the requirements for passing maneuvers determined. Further to diagnose traffic behavior, apparatus has been developed to record the speed, longitudinal spacing, and the transverse position of every vehicle using the highway at any point. Results of studies with this equipment will show the effect of shoulders of various types, of pavement width, and of the alignment of the highway on traffic behavior. Provision can be made, as a result of these studies, for those

features and construction methods that induce safe driving practices. To provide data from which equal regulations may be drawn, and from which reasonable highway design standards may be evolved, is the purpose of exhaustive studies being made of motortruck performance.

One of the most difficult problems to be faced in the near future is that of providing adequate rights-of-way for main trunk lines. The greatest need for such highways is in and near the cities, where land values are high, and which are in fact the source and destination of a large part of rural traffic. The cost of acquiring rights-of-way frequently appears to be excessive and there is hesitation and failure on the part of public agencies to acquire adequate widths. The Public Roads Administration, in cooperation with the University of Wisconsin, is now engaged in conducting studies of present procedures for the acquisition of land for highways, and in particular, that phase of the procedure concerned with excess condemnation. Inasmuch as excess condemnation is permitted, by constitution, in but a very few States, this study will be limited.

Every State is now conducting a highway planning survey. The first of these State-wide Highway Planning Surveys was initiated in 1935, and the last was commenced in 1940. The progress of the work varies in the different States. For information concerning the planning survey in any State, inquiry should be directed to the State highway department of that State.

The Public Roads Administration has direct contact with State highway departments through its district organizations, of which there are 13, each in charge of a district engineer. Twelve of the districts include from two to eight States. District No. 11 covers the territory of Alaska, where the only Public Roads Administration activity is the construction of forest roads. The Public Roads Administration also maintains in most of the States, as a part of the district organization and as a still more direct contact with the highway departments, a State office under a responsible engineer who works in close cooperation with the highway department.

At San Francisco, there is a regional headquarters for the administration of Federal Aid and emergency authorizations to the western States and of national forest and national park road work in these States, under the direction of a regional chief through whom the district engineers of the five western districts report.

The Division of National Parks—East and South, in charge of a district engineer, coordinates National park and forest highways with other highway systems and supervises their location, design, and construction in all States east of the Rocky Mountains.

Local Planning Data and Information Available

The large amount of survey and statistical material which has been gathered as background for the Highway Planning Surveys is located at the highway department offices of the States.

In the Washington offices of the Public Roads Administration is the largest collection of highway photographs in the world, totaling some 68,000 negatives alone; of highways, intersections, roadside treatment, bridges, tunnels, and all other highway types and conditions in every State in the country.

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Publications of the Public Roads Administration—Federal Works Agency. Lists reports on:
Highway Location, Surveys, and General Design.

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Bituminous Surfaces, Materials, and Mixtures.
Concrete, Concrete Materials, and Concrete Roads.
Block Pavements.
Motor Vehicle Impact.
Highway Construction Cost and Efficiency.
Highway Finance and Administration.
Highway Transport and Traffic.
Reports on transportation surveys in Ohio (1927); Vermont (1927); New Hampshire (1927); Connecticut (1928); Pennsylvania (1928); Cleveland, Ohio (1928); and on the Federal-aid highway system of 11 western States (1930).
Highway Bridge Design and Culverts.
Flow of Water in Relation to Highway Structures.
Laboratory Methods.
Roadside Improvement.
Highway Safety.
Miscellaneous.

PUBLIC WORKS ADMINISTRATION

National Industrial Recovery Act (Public, No. 67, 73d Cong.), Approved June 16, 1933.
Emergency Appropriation Act, fiscal year 1935 (Public, No. 412, 73d Cong.), Approved June 19, 1934.
Emergency Relief Appropriation Act of 1935 (Public Res. No. 11, 74th Cong.), Approved April 8, 1935.
First Deficiency Appropriation Act, fiscal year 1936 (Public, No. 739, 74th Cong.), Approved June 22, 1936.
Public Works Administration Extension Act of 1937 (Public Res. No. 47, 75th Cong.), Approved June 29, 1937.
Public Works Administration Appropriation Act of 1938 (Public, No. 123, 75th Cong.), Approved June 21, 1938.
First Plan on Government Reorganization (76th Cong., Doc. 262), Approved 60 days after presented to the Congress on April 25, 1939.

Brief General Statement of Agency Functions

The primary objectives of the Public Works Administration is to create opportunities for employment and to stimulate industry and business by aiding in the construction of needed and useful public works of a permanent character.

To carry out this objective, the P. W. A. itself undertakes no construction directly, but allots funds with the approval of the President to the several Federal agencies, and makes grants, and loans—if loans are desired—to States, counties, cities, and other public bodies. The Public Works Administration does not initiate any projects.

Federal Projects.—These projects are those for which grants have been made to the various Federal departments and agencies. They originate in and are submitted by the Federal agencies to the P. W. A. for consideration.

Non-Federal Projects.—These projects are those for which grants, and loans (if loans are desired) are made to States, counties, cities, and other public bodies. They are initiated by local public bodies and the desire of the community is expressed by its authority in power.

As part of its criteria for making allotments for non-Federal projects, the P. W. A. considers the need of the proposed works, the timeliness of their construction, the allowances made for future need and obsolescence, their relationship to other public facilities, and their relationship to local and regional planning. It is the policy of P. W. A. in making allotments to give preference to such projects which will conform to local and regional planning, and to assist in such planning. Typical of such endeavor has been the cleaning up of polluted watersheds, through the making of several allotments for sewerage works and sewage treatment plants to several communities which utilize the same stream for the disposal of wastes. P. W. A. has no legal power, nor does it attempt to determine the nature, type, and quality of public works to be constructed by local public jurisdictions, but is willing to render all public bodies such advice as it has gathered from its experience.

Activities Affecting and Assistance to Local Planning

Physical Project Accomplishments

As of June 15, 1940, the total allotments on 17,818 Federal projects amounted to \$1,777,424,304. The sum

of \$468,167,736 has been expended on streets and highways; \$34,288,299 on utilities; \$304,348,813 on buildings; \$262,449,909 on flood control, water power, and reclamation; \$257,010,146 on water navigation aids; \$23,368,258 on engineering structures; \$45,390,032 on aviation; \$5,247,633 on recreation; \$270,493,029 on vessels, and \$108,660,449 on miscellaneous projects.

As of June 15, 1940, 16,648 non-Federal projects estimated to cost \$4,220,824,290 had received allotments. Of this amount \$1,896,347,863 was supplied by the applicants, \$816,814,472 was loaned and \$1,507,661,955 was allotted in the form of grants by the P. W. A. Streets and highways accounted for \$453,884,766 of the total estimated cost; sewers, waterworks, power, and other facilities for \$953,756,837; buildings for \$1,811,560,313; flood-control, water power, and reclamation, \$179,064,666; water navigation aids, \$19,713,130; aviation, \$3,175,781; recreational, \$23,730,879; railroads, \$200,974,500; engineering structures, \$469,198,673; and for miscellaneous activities, \$105,764,745.

Since its inception in 1933, the Public Works Administration has made allotments for 7,283 educational building projects costing \$1,176,361,070, of which the sponsors contributed \$604,959,080; hospital construction costing \$343,425,910, providing 121,760 new beds; 1,524 sewage systems costing more than \$466,000,000; 2,411 non-Federal waterworks, \$310,030,035; 36,628 miles of highways and roads, \$591,016,109; 368 airport improvement projects, \$48,565,813; 126 non-Federal prisons and jails, and 73 Federal prison projects, costing \$39,487,353. These are only a portion of the total P. W. A. project construction, but serve to indicate the extent and magnitude of the work accomplished.

This extensive physical improvement and new construction by the P. W. A. throughout the Nation has had and will continue to have for many years to come a most important effect on local planning, because their construction and improvement represents a new and improved "permanent" pattern of public works, which must be geared in with local planning of the present and for the future. Already, this extensive work has affected such local considerations as utility and transportation planning, and indirectly, housing, community services, and many other local factors.

It is important from the point of view of the local community that insofar as possible, such construction and improvement projects be related to long-range programming and planning at local, regional, State, and national levels, in order that the permanent results of public works projects may conform to and not be in contradiction to the best projected development of the locality. The achievement of this important aim is at present primarily the concern of the Federal agency or of the particular locality in programming its project for submission to the P. W. A.

In assisting non-Federal agencies financially, in the construction of public works, P. W. A. has rendered direct aid in the matter of local planning in several ways. However, due to lack of funds, P. W. A. is no longer in position to participate in assisting local planning. Nonetheless, the following is a description of the type of work which P. W. A. has done. First, P. W. A., in cooperation with the National Resources Planning Board, has participated in the work of organizing and conducting demonstration studies in advance programming in a number of cities. Second, the P. W. A. has rendered legal aid through the study of the laws which govern the applicant. If these laws were of such a restrictive or qualifying nature as to make it impossible for the applicant to undertake the project as proposed, P. W. A. suggested upon the request of the applicant, various changes in the scope of the project or in existing legislation which, if adopted, would have permitted the community to undertake the project. Third, P. W. A. has assisted local public bodies by means of financial advice, if the community could not readily raise its own share of the funds needed for construction of the project. Such matters as the types of obligations, their amount, yield, and maturity were considered. And, fourth, P. W. A. has assisted non-Federal agencies with engineering and architectural problems incidental to the examination of the technical feasibility and soundness of the proposed project.

Program Planning for Public Works

The Public Works Administration, in anticipation of the launching of a program of education, stimulation and guidance of local governments (Municipal, County, and State) in advance planning and in the preparation, annually of long-range programs for public improvements, has cooperated with the National Resources Planning Board in conducting demonstration programs in one city in each of the P. W. A. regions.

These demonstration cities were chosen of varying sizes and for the degree of development, availability of plans and financial data, records of past accomplishments in public works improvements, and the cooperative spirit shown by the officials.

From the study of results secured in these demonstration programs, it is planned to develop sound methods of procedure in arranging for and carrying forward similar programs in progressive municipalities throughout the country. These methods have been embodied in a guide for city officials engaged in the actual programming. It is anticipated that this guide which is being prepared by the N. R. P. B. will be released shortly.

The Public Works Administration has furnished on each demonstration project technical advisors consist-

ing of a planning engineer and a finance examiner.

The planning engineer worked with the city's representatives on matters affecting the physical side of the program and collaborated with the finance examiner in contacts with the designated financial officer of the city. He largely directed the compilation of data as to needs requested from each department of the city, subject at all times to the approval of the city's representatives. The planning engineer explained the principles of programming to department heads in an effort to enlist their interest in, and support of, the adoption of programming as an established policy of the city.

The finance examiner worked with the finance representatives of the city in compiling tabulated records of annual receipts and disbursement by departments for a predetermined period in the past, in estimating the future annual receipts and disbursements, and in finally determining the funds which may be made available for the improvement program, either from tax receipts, the sale of bonds, or other sources. The finance examiner assisted the finance officer of the city in reaching a conclusion as to the method of making the detailed financial determinations.

The term "long-range programming," as used herein, indicates the preparation annually of a program for public improvements over a term of 5 to 10 years, the first year's schedule being made definite by the adoption of a capital budget. The remaining years of each annual program are tentative only, and subject to revision or complete readjustment when the preparation of the next annual program is begun.

It is believed that long-range programming as defined above will provide a means of securing a more widespread adoption of the principle of advance planning for the physical development of the areas of local government units.

Local Planning Data and Information Available

The Public Works Administration has certain material available which should be of benefit to local planning agencies. In addition to various publications, such as P. W. A. Aids to Education and Revenue Bond Financing by Political Subdivisions, time studies have been made which should be of value from the standpoint of indicating the time required for the preparation of plans, and the various preliminary work that must be done prior to the actual starting of construction of the project, and the time required for the completion of the project by types and sizes of projects.

In order to determine the extent to which P. W. A. affected the construction and employment situation, the Bureau of Labor Statistics of the Department of Labor was called upon to make a study of this subject. After a period of intensive research, it was ascertained

that as of June 1, 1940, the total man-hours of employment on the site reached the figure of 2,060,000,000, which represents in wages a total of \$1,565,079,700 paid at the construction sites. Despite their magnitude, these figures represent only about one-fourth of the total employment created by the program and about one-third of the total P. W. A. expenditures. Out of the average dollar which goes for labor and materials, 35.8 cents went for labor at the site, while 64.2 cents went for materials. This ratio varies with the type of construction. For a detailed analysis, the reader is referred to P. W. A. and Industry—a 4-year study of regenerative employment, which was prepared by the Bureau of Labor Statistics, and America Builds, a publication of the Public Works Administration.

A book prepared by the Architectural Surveys Committee of the Public Works Administration should also be helpful in enabling local planning agencies to see in pictorial form the various types of architecture used throughout the country for different types of projects, so that the best in design may be employed in future works.

In addition to the above, the following publications are available:

1. P. W. A. A Four-Year Record of the Construction of Permanent and Useful Public Works, 1937. U. S. Government Printing Office.
2. P. W. A. in Action—Off the Relief Rolls Onto Pay Rolls. A map showing how the Public Works Program is building for a greater nation. Printed by U. S. Geological Survey.
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9. P. W. A. Provides Modern Hospitals. Federal Emergency Administration of Public Works, Projects Division, Research Section. 1937. U. S. Government Printing Office.
10. P. W. A. non-Federal Sewage Disposal Projects. Federal Emergency Administration of Public Works. June 23, 1937. Supplement showing additional allotments. January 15, 1938.
11. P. W. A. non-Federal Projects for Construction and Improvement of Airports and Aviation Facilities. P. W. A. Federal Projects for the Construction and Improvement of Landing Fields and Related Projects. Federal Works Agency, Public Works Administration, Projects and Statistics Division. June 15, 1940.

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16. The story of P. W. A. Building for Recovery. Federal Emergency Administration of Public Works, Division of Information, 1939.
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18. Federal Works Agency, Division of Information, 1940.

THE UNITED STATES HOUSING AUTHORITY

United States Housing Authority Act of 1937.
Amendments of 1938.

Brief General Statement of Agency Functions

The purpose of the United States Housing Authority is to assist the several States and their political subdivisions to remedy the unsafe and unsanitary housing conditions and the acute shortage of decent, safe, and sanitary dwellings for families of low income, and to alleviate present and recurring unemployment.

The U. S. H. A. may make loans to local public housing agencies to assist in the development, acquisition, or administration of low-rent housing or slum-clearance projects. These local public housing agencies, generally known as local authorities, are separate entities created under authority of State Enabling Acts. The U. S. H. A. does not deal with private agencies, or solely and specifically with planning agencies.

The local authorities themselves plan, construct, and operate the housing projects. The role of the U. S. H. A. is restricted to the making of loans and annual contributions in connection with low-rent housing projects. The U. S. H. A. has a vital interest in the promotion of sound planning both in connection with the projects aided by it and in the total housing situation in the various cities.

The U. S. H. A. is authorized to loan to local authorities up to 90 percent of the development cost of their projects. Such loans bear interest at the going Federal rate of interest plus $\frac{1}{2}$ of 1 percent, amounting to 3 or 3 $\frac{1}{4}$ percent interest. Loans in general are made for a period of 60 years.

The local housing authorities must obtain at least 10 percent of the project cost from sources other than the U. S. H. A. The local authorities have usually borrowed the amount of their participation from private sources. It is probable that such local participation will, in general, amount to much more than the required 10 percent, and that the interest rates will be somewhat

Executive Order 7732, 1937.
Executive Order 7839, 1938.

less than the rates at which the U. S. H. A. is authorized to loan.

The U. S. H. A. also makes annual contributions to the local authorities to aid them in attaining rents within the financial reach of families in the lowest income group now living in slums or substandard housing. These annual contributions may be contracted for at an amount per annum equal to the annual yield at the going Federal rate of interest plus 1 percent upon the development cost of the project, amounting to 3 $\frac{1}{4}$ percent and in some cases to 3 $\frac{1}{2}$ percent per annum. These annual contributions are contracted for over a period of 60 years. It is expressly provided, however, that the need for them shall be reexamined after 10 years and every 5 years thereafter and, if feasible, the amount of the annual contribution be reduced at the time of such reexamination. Under its present legislation the U. S. H. A. is authorized to enter into contracts providing for annual contributions aggregating not more than \$28,000,000 a year. The faith of the United States is pledged to the payment of all annual contributions contracted for pursuant to the authority granted the U. S. H. A. by Congress.

As a condition to the receipt of U. S. H. A. annual contributions, local authorities are required by law to make local contributions equal to at least 20 percent of the Federal contributions. Such local contributions may be made either in the form of cash or tax remission, general or special, or tax exemptions. In general, this local contribution is being made in the form of tax exemptions granted by the State laws. In some cases, where conditions permit, local authorities make some payments in lieu of taxes to local governments. In general, the value of the local contributions is about one-half that of the U. S. H. A. annual contributions.

The act requires the elimination by demolition, condemnation, or effective closing, or the compulsory repair or improvement of unsafe or unsanitary dwelling units in the locality substantially equal in number to the new

dwelling units in the new project, except that the elimination of slum dwellings may be deferred in localities where an acute shortage exists. When projects are constructed on slum sites the old dwellings destroyed count towards the equivalent elimination. When vacant sites are used slum buildings are eliminated in other parts of the locality, generally by use of the police power.

The cost of construction (excluding land, cost of demolition and nondwelling facilities) of any housing project is limited to \$1,000 per room and \$4,000 per family dwelling unit in cities with a population of 500,000 or less. In cities of over 500,000 the limits are \$1,250 per room and \$5,000 per family dwelling unit, where such higher cost is justified by reason of higher costs of labor and materials and other construction expenses.

The act is designed to assist the construction of dwelling accommodations only for those who lack the amount of income necessary to enable them to live in decent, safe, and sanitary privately owned housing without overcrowding. The act prohibits the acceptance of a family as tenant whose aggregate income exceeds five times the rental (including utility charges and costs) of the quarters to be furnished; or in the case of families with three or more dependents, six times such rental.

The Authority has a capital stock of \$1,000,000 subscribed by the United States and paid by the Secretary of the Treasury. The U. S. H. A. is authorized to issue obligations in the form of notes, bonds, or otherwise, which it may sell to obtain funds for the purposes of the act. The total amount of such obligations is limited to \$800,000,000. These obligations are issued in such manner and sold at prices prescribed by the Authority, with the approval of the Secretary of the Treasury and are exempt, both as to principal and interest, from all taxation, except surtaxes, estate, inheritance, and gift taxes, by the United States or by any State, county, municipality, or local taxing authority. Such obligations are fully and unconditionally guaranteed by the United States as to payment of both interest and principal.

Not more than 10 percent of the funds provided for in the act, whether in the form of loans, grants, or annual contributions, may be expended in any one State.

Thirty-eight States, as of June 15, 1940, have passed legislation enabling them to participate in the U. S. H. A. program. Decisions in the highest courts of 24 States have upheld in its entirety the constitutionality of the legislation in their respective States. At the time the U. S. H. A. was organized in 1937, there were 47 local authorities. The number of these has now increased to 479.

As of June 15, 1940, the U. S. H. A. has made total commitments amounting to \$638,213,000. Of this sum, \$638,213,000 is represented by loan contracts, approved by the President, covering 413 projects for 171 local

housing authorities in 32 States, the District of Columbia, and the territories of Hawaii and Puerto Rico. The balance of \$50,530,517 is in the form of earmarkings held for the various local authorities pending the preparation of their formal application for loans. The total present program of the U. S. H. A. will provide approximately 160,000 dwelling units which will rehouse some 640,000 slum dwellers.

Activities Affecting and Assistance to Local Planning

The U. S. H. A. housing and slum-clearance program is decentralized, and local authorities are entirely responsible for the selection of sites, the planning of projects, and their construction and operation. The role of the U. S. H. A. is restricted to the rendering of financial aid and to giving advice and assistance in the planning, construction, and operation of projects.

The local authorities in applying for financial assistance from the U. S. H. A. for a low-rent housing project are requested to submit extensive planning data both as to the economic and physical features of the proposed project. The Outline of Application prepared by the U. S. H. A. sets forth in detail the material required.

The section of the application dealing with the Need for Low-Rent Housing and the Families to be Housed provides for a summary of all economic and social information available locally on this subject. Information is requested on population changes in recent years, including family size by race or color. The changes in the existing supply of housing over a period of years are studied through data on building permits and demolitions, and these changes are compared with the changes in population. The existing situation as to vacancies in various price ranges is also reported. The local authority is asked to adopt a statement defining for its locality what it considers to be substandard housing in relation to local habits and needs. Information is requested as to the number and characteristics of the families living in such substandard housing, particularly as to their incomes and the rents which they are now paying.

Particular attention is paid to economic and social analysis in order to assure that all projects constructed are well adapted to the means and to the needs of low-income families and to guarantee that public housing does not invade the market which private enterprise can serve. On the basis of the information in this section of the application, the local authorities are asked to state their conclusions as to the number of families in need of public housing, the size of the dwelling units required and appropriate rentals for families of different sizes.

As a preliminary to the selection of sites, local authorities are requested to study the land uses of the entire locality. Maps showing actual land uses are prepared and submitted to the U. S. H. A. in connection with every application. Information is also submitted as to transportation facilities, density of population in different areas of the city, and existing zoning regulations. The local authorities are requested to submit very brief descriptions of the various sites it has had under consideration, and to report on their respective merits.

Further information is requested in the application as to the particular site selected for the project. A neighborhood map showing all conditions within a thousand feet of the project is requested, as well as an aerial photograph showing both the site and its neighborhood. Information is submitted as to the relation of the site to the city as a whole, its accessibility, its neighborhood surroundings, and its suitability for the proposed race or nationality. The zoning of the proposed site is discussed in detail and any changes in zoning necessary for its protection are recommended. Particular attention is paid to schools, parks, playgrounds, and other community facilities and shopping centers which will be available to the occupants of the proposed project.

The specific project itself is planned in relation to its surrounding neighborhood. The proposed boundaries of the site are discussed in detail and the existing conditions both as to buildings and utilities are described. Recommendations are made as to streets and alleys to be vacated in order to establish a suitable neighborhood, and as to any new streets and alleys or street widenings which are contemplated.

Finally, preliminary lay-outs of the project are submitted with the application showing the location of proposed buildings, and the treatment of the land. Special attention is given to laying out the site so that the largest possible area will be entrusted to tenant maintenance rather than maintenance at the expense of the project. Sketch plans for the dwellings are required, showing sizes and facilities adapted to the needs of families now living in substandard quarters.

Upon the acceptance of an application by the U. S. H. A. and after approval by the President, contracts are entered into providing for loans and annual contributions. The local authority then proceeds to make final contracts with its architects and engineers. The final boundaries of the proposed site are studied in greater detail, taking into account difficulties which sometimes arise in connection with the acquisition of particular parcels. Plans and specifications for the site improvements and the buildings are prepared and submitted to the U. S. H. A.

The proposed changes in zoning both as to the site itself and of its neighborhood are taken up with the local government and the best possible solutions obtained. It is also occasionally necessary, because of the special problems involved in public housing, to secure changes in local building regulations.

The local authority is always urged to consult the local planning commission at the earliest possible date in order to secure its advice as to the selection of sites, their relation to the general city plan, and appropriate protection by zoning. The approval by the planning commission of the proposed site is highly desirable though not a mandatory condition.

The U. S. H. A. is prepared to render valuable assistance to local authorities both in the initial stages of planning leading up to an application, and in the detailed planning of the project after contracts have been entered into. Upon request from the local authority, the U. S. H. A. sends a project adviser who renders general assistance in all the planning aspects of the project. The project adviser also coordinates the assistance of other divisions of the U. S. H. A. to the local authority. Special advisers in connection with the economic phases for the program, the technical problems of site layout and construction, and land acquisition problems are sent to the localities upon their request. These advisers make available to the local technicians and consultants the advice and experience of the U. S. H. A. in connection with the selection of sites and the planning of low-rent housing.

As an aid to the regular members of its staff, the U. S. H. A. has retained as consultants a number of outstanding city planners. In addition to the opinion of its own staff members, the U. S. H. A. generally asks these city planning consultants to render independent opinions on proposed sites and questions of zoning.

Local Planning Data and Information Available

One of the most useful and necessary functions of the United States Housing Authority is to serve as a national clearing house of technical and semi-technical information about slum clearance and low-rent housing. The elimination of waste in the planning of housing projects by the localities, and the introduction of positive economies in construction, management, and operation, must necessarily result in large part from the experience and observations of the U. S. H. A. and the transmission of this experience to the various localities for practical application.

Consistent with the act's authorization to the U. S. H. A. to "publish and disseminate information pertinent to the various aspects of housing," valuable studies, for the most part of a technical or semitechnical

nature, have been prepared and others will be published in the future. The U. S. H. A. feels confident that they will prove real contributions to the housing field as tested data on housing needs and on standards and techniques relating to the development of successful low-rent housing projects.

The Technical Division of the United States Housing Authority is making exhaustive planning studies on the following subjects:

1. Site planning and landscaping, with particular emphasis on low maintenance costs.
2. Space requirements, arrangements, and equipment of dwelling units.
3. Management costs as related to the design and equipment of low-rent housing projects for the purpose of coordinating Public Works Administration and U. S. H. A. experience.
4. Community facilities.
5. Tenant satisfactions and dissatisfactions in existing housing projects.

In addition to these intensive studies, the Technical Division collects and studies the findings of other research agencies and related organizations concerned with the technical aspects of housing. It does not, however, itself engage in any laboratory research in connection with materials or their use.

The Division of Research and Statistics has three sections, all of which are conducting studies related to low-rent housing:

1. *Research Section*.—The research program which has been planned includes the following items. It will be noted that most of them involve a long-term program.
 - (a) Effect of the U. S. H. A. program on living conditions, including changes in mortality rates, delinquency, crime, and incidence of disease.
 - (b) Housing shortage and substandard housing in the United States.
 - (c) Study of relation between rents, incomes, and family sizes in the United States with special reference to the lowest income group.
 - (d) Effect of the low-rent housing and slum clearance on municipal services and costs, real property values, and tax delinquency.
 - (e) Study of trends of industry in municipalities in relation to low-rent housing needs, and of the effect of the U. S. H. A. program on wages and earnings in the building trades, on construction materials, costs, and on private home building.
 - (f) Public housing program in the United States in relation to public housing programs in foreign countries.
2. *Surveys and Analysis Section*.—The Surveys and Analysis Section, while primarily a service section, makes detailed analyses of the housing market in cities having local housing authorities. This section prepares, before a low-rent housing program is inaugurated, market reports analyzing conditions in a given city which affect a housing program. This requires study to determine median rentals, average incomes of family, extent of substandard housing, etc. This section also prepares market reports for tenant selection and management purposes. The various market reports require analysis of such material as real property surveys, local housing studies, consumer purchase studies, and national health surveys.
3. *Statistics Section*.—The main purpose of the Statistics Section is to prepare material on operating statistics. This section will also prepare the permanent record of the activities and operations of the United States Housing Authority from a statistical point of view. The work of the section divides itself into four units:
 - (a) Tenant and occupancy statistics;

- (b) Land, land acquisition, ad valorem taxation, and related subjects;
- (c) Construction and employment, their various corollaries and related subjects; and
- (d) Project administrative, operating, and monthly cost analyses.

Publications

The United States Housing Act of 1937, as Amended, 49 pp. A pamphlet containing the legislative basis of the U. S. H. A. program. Provisions of related laws and executive orders appear in the appendix.

Annual Report of the United States Housing Authority, 1939, 1940, 50 pp. The most authoritative source of information about the low-rent housing program, this report contains sections on rents, income groups served, financial provisions, development costs, land, elimination of slums, labor and employment, progress of program, local housing authorities and enabling legislation, F. W. A. Housing Division and limited dividend projects, and U. S. H. A. organization. There are in addition 10 tables and 9 appendices.

What the Housing Act Can Do for Your City. 1939, 83 pp. (Illustrated.) Based upon the first year of the low-rent housing program, this pamphlet presents a comprehensive and authoritative picture of the character and development of that program. Designed for individuals and groups interested in the establishment of local housing authorities or endeavoring to understand and participate in their local authority's work.

Design of Low-Rent Housing Projects: Planning the Site. 1939, 88 pp. (Illustrated.) Although designated as a new version of Bulletin No. 11 on Policy and Procedure, this profusely illustrated pamphlet is in a sense an independent publication. It contains sections on basic design principles, design and organization of the site, design and treatment of open areas for recreation purposes, and planting and plant material.

Questions and Answers. 1940, 28 pp. (Illustrated.) A pamphlet containing the answers to questions most frequently asked about the slum clearance and low-rent housing program.

Introduction to Housing: Facts and Principles. By Edith Elmer Wood. 1940, 161 pp. (Illustrated.) Basic material simply and attractively presented.

What Does the Housing Program Cost? 1940, 32 pp. Explanation of U. S. H. A. financing plan, including factual statements regarding aspects frequently misunderstood.

Housing and Recreation. 1940, 40 pp. (Illustrated.) General statement on development of outdoor space for recreation purposes.

Planning Recreation Service for U. S. H. A.—Aided Housing Projects. 1939, 10 pp. Suggestions to municipal recreation executives for planning recreation services during all stages of the development and operation of a housing project.

Housing and Welfare. 1940. Report of survey conducted by U. S. H. A. in cooperation with Social Security Board. Summarizes sources of data on housing conditions of relief and public-assistance families. Suggests ways of cooperation between housing and welfare officials. Contains annotated bibliography, and list of national, State, and local welfare and housing agencies.

Public Housing Weekly News. 4 pp. A weekly publication describing current happenings in public housing, including data on projects and program statistics.

Leaflets:

- Better Housing, Better Health.
Bringing Down Construction Costs.

- Clearing the Slums.
- Housing and Juvenile Delinquency.
- Housing and Your Community.
- How the U. S. H. A. Works.
- Labor and Housing.
- Low Rents for Low Incomes.
- Public Housing and the Negro.
- Public Housing Here and in Great Britain.
- P. W. A. Housing Division Projects.
- Rehousing Relief Families.
- Rural Housing.
- Tax Exemption of Public Housing.
- The Businessman and Public Housing.
- Summary of Standards and Requirements for U. S. H. A.-Aided Projects. 1940. 40 pp. A review of minimum essential general standards and requirements for the development and management of projects.
- The United States Housing Authority in the Framework of American Government and Law. 19 pp. Keyserling, Leon H. An examination of legal problems and machinery involved in the U. S. H. A. program. Text of speech before Municipal Law Section, American Bar Association.
- Statements of Franklin D. Roosevelt on Housing. 9 pp. Roosevelt, Franklin D. Quotations on housing conditions, laws and problems.
- Housing Standards and the U. S. H. A. Program. 4 pp. Shire, Albert C. An analysis of the effect of low rentals, low capital costs, and durability upon architectural standards.
- Economic Implications of Public Housing. 5 pp. Weaver, Robert C. An exposition of the low-rent housing program as a beneficial form of public works.
- Local Responsibility for U. S. H. A.-Aided Projects. 1939. 3 pp. A brief discussion of the responsibilities of local housing authorities to U. S. H. A.-aided projects.
- Bulletins on policy and procedure:
 - No. 1. Acquisition of Excess Land.
 - No. 2. Room Count.
 - No. 3. Equivalent Elimination of Unsafe or Insanitary Dwellings.
 - No. 4. Development Cost of a Low-Rent Housing Project.
 - Addendum No. 1.—Art Work for U. S. H. A.-Aided Projects.
 - Addendum No. 2.—The Cost of Automobiles as an Item of Development Cost.
 - No. 5. Progressive Steps in the Initiation of a Low-Rent Housing Project.
 - Addendum No. 1.—Methods for Selecting Architectural Services.
 - Addendum No. 2.—Selecting Architects Through Qualifying Competition.

- No. 6. Local Contributions and Other Local Aids in Achieving Low Rents.
 - Addendum No. 1.—Revised Material on "Capital Donations."
- No. 7. Advance Loan.
- No. 8. Acquisition of Sites for Low-Rent Housing Projects.
- No. 9. Construction Contracts.
 - Addendum No. 1.—Allowance for Contractors' Overhead and Profit on Work Performed Under Change Orders by Subcontractors.
- No. 10. Rehousing Occupants of Areas To Be Cleared for Housing Projects.
- No. 11. Design of Low-Rent Housing Projects: Planning the Site.
- No. 12. Dwelling Unit Planning.
- No. 13. Preparation of Drawings and Specifications.
- No. 14. Site Engineering Design.
- No. 15. Steps in the Development of a Low-Rent Housing Project Subsequent to the Execution of the Contracts for Loan and Annual Contribution.
- No. 16. Planning for Low Rents.
 - Addendum No. 1.—Achieving Even Lower Management, Operation, and Maintenance Costs.
- No. 17. Definition of Terms.
- No. 18. Site Selection.
- No. 19. Planning Utility Services and Rate Negotiations.
- No. 20. Design of Low-Rent Housing Projects: Heating.
- No. 21. Design of Low-Rent Housing Projects: The Structure.
- No. 22. Initial Steps in Tenant Selection.
 - Addendum No. 1.—Personnel for Initial Tenant Selection and Renting.
 - Addendum No. 2.—Dwellings Occupied by Project Employees.
- No. 23. Personnel Requirements for Supervision and Inspection of Projects During Construction.
- No. 24. Establishing Rent Schedules for U. S. H. A.-Aided Projects.
- No. 25. Subsurface Soil Investigation.
- No. 26. Insurance on U. S. H. A.-Aided Projects.
- No. 27. Zoning and Resoning for U. S. H. A.-Aided Projects.
- No. 28. Manual of Management Reports.
- No. 29. Budgeting Repair, Maintenance, and Replacement Costs.
- No. 30.—Estimates of Average Annual Income and Expense and Determination of U. S. H. A. Annual Contributions for U. S. H. A.-Aided Projects.
- No. 31. Suggested Procedures for Initial Tenant Selection and Renting.
- No. 32. The Management Program.
- No. 33. Budgeting Costs of Operating Services.

WORK PROJECTS ADMINISTRATION

- Executive Order 7084 of May 6, 1935.
- Emergency Relief Appropriation Act of 1935, 1936, 1937, 1938, 1939, and 1940.
- Executive Orders 7396 of June 22, 1936, and 7649 of June 29, 1937.
- Executive Orders, Rules, and Regulations Under Various Relief Acts.

Brief General Statement of Agency Functions

The W. P. A. was inaugurated by the Federal Government in the summer of 1935 to provide jobs for

employable persons in need of relief. This program, which superseded the system of grants-in-aid to the States for direct or work relief under the Federal Emergency Relief Administration, represents a shift

in emphasis whereby Federal unemployment-relief funds are devoted exclusively to providing emergency public employment.

The W. P. A. is organized to obtain maximum flexibility in meeting changing relief needs. Further decentralization and flexibility is obtained by the establishment of intra-State area offices. Each State organization is in charge of a State administrator. Regional directors in charge of regional offices give advice and instructions to the State and area offices and make reports and recommendations to the Washington office.

Projects originate and are sponsored by branches of State and local governments. Sponsors outline basic plans and draw up specifications, including a complete project description, cost estimates indicating the proportion to be paid by the sponsor, labor requirements, and other essential details. Direct supervision of projects placed in operation is undertaken by the sponsor wherever possible.

Employment on projects operated by W. P. A. during the week ending May 29, 1940, totaled 1,837,854. This employment was distributed as follows by major types of projects: Highways, roads, and streets, 784,596 (42.7 percent); other construction, 572,362 (31.1 percent); professional and services projects, 464,154 (25.3 percent); other, 16,742 (0.9 percent).

Employment on projects that are relevant to local planning activities was as follows: Engineering surveys, 8,989; education, 80,053; research and surveys, 35,994; public records, 32,526; historical records survey, 8,596; public health and hospital work, 12,364.

Persons receiving W. P. A. employment are drawn predominantly from the unemployed who have been certified by local relief agencies as being in need of relief. Wage payments are determined by a security-wage schedule according to which monthly earnings vary by regions, degree of urbanization, and degree of skill.

W. P. A. employment reached a peak of 3,036,000 in February 1936, declined to a low point of 1,451,000 in September 1937, climbed to a new peak of 3,271,000 in November 1938, and declined to 1,608,000 in September 1939.

Funds expended through May 31, 1940, on programs operated by the W. P. A. totaled \$3,212,143,000.

Activities Affecting and Assistance to Local Planning

The Work Projects Administration affects planning at the local level through:

1. Physical accomplishments.
2. Experiences and conclusions with relation to relief.
3. Surveys and studies related to planning or for planning bodies.

1. *Physical Accomplishments.*—Since its inception in 1935, the Work Projects Administration has completed a very large amount of physical improvement and construction throughout the country. As of December 1939: 470,000 miles of road had been built or improved, of which 412,000 miles were rural roads and highways; 57,000 new bridges had been completed and more than 37,000 bridges improved; 677,000 new culverts laid and 84,000 reconducted; 15,000 miles of new curbs and 4,000 miles of new gutters constructed and many more miles reconducted; 189 new airplane landing fields constructed, 311 such fields improved, and 50 enlarged; and work had been completed on 89,000 buildings of which approximately one-fourth were new. These totals represent only a portion of the grand total of physical improvement accomplished by the Work Projects Administration and have themselves been increased since December 1939.

This extensive amount of physical improvement and new construction, in almost every city, town and county throughout the Nation, has had and will continue to have for many years to come a most important effect on local planning, for these multitudinous improvements, because they represent a pattern of new and improved "permanent" construction and work, must be geared in with all planning for the present and future.

It is imperative from the point of view of the local community that insofar as possible such construction and improvement work be related to long-range programming and planning at the local, regional, State, and national level, in order that the permanent results of work relief may conform with and not be in contradiction to the best projected development of the locality. The achievement of this important aid is at present primarily the concern of the locality in programming its work for submission to the Work Projects Administration. Careful planning consideration and survey in local applications for projects will be many times repaid in years to come.

From the point of view of the Work Projects Administration, only a work program that produces completed projects of recognized value will be accorded continued support. In the field of community improvement, this is a strong reason for entrusting each local community with responsibility for the selection of projects. This, in turn, should mean that each community carefully plans a program of projects to be undertaken, making its selection on the basis of present and future needs for public facilities and services. This process of selection could be improved if local planning agencies were established in each community and if sufficient data were available to these agencies.

Those communities with developed plans have been able to take the fullest advantage of work-relief oppor-

tunities; they have received the greatest return for the money and effort expended on work-relief projects. Other communities have realized the desirability of planning through cooperation with the Federal Government in the conduct of a work program.

2. Experience and Conclusions with Relation to Relief.—The actual relief work effectuated by the Work Projects Administration has had great import for any local employment and social planning during recent years and reflected significance for that which such planning affects. The experiences, techniques, and conclusions of the Work Projects Administration in its work-relief activities will be of value to any comprehensive local planning.

The Division of Social Research has been primarily concerned with this work and in the Monographs and Special Reports which it has published has presented studies and conclusions concerning social relief problems.

3. Surveys and Studies Related to Planning or for Planning Bodies.—The opportunities for more public facilities that have been made available to local communities by the W. P. A. through vast public expenditures to provide employment have given a new stimulus and significance to planning.

The W. P. A. has cooperated in planning activities by providing funds and personnel for research studies and basic-data surveys of interest to and in many cases sponsored by local planning agencies. Fact-gathering projects that are relevant to the work of local planning agencies have been a part of the various Federal work-relief programs organized since 1933. During the W. P. A. period alone, projects for planning boards approved by the President (through June 30, 1939) have involved a total of \$30,643,400, of which \$4,840,765 represented sponsors' funds.

W. P. A. projects approved by the President under the E. R. A. acts of 1935, 1936, 1937, and 1938 for planning boards, including changes, rescissions, etc., through June 30, 1939

	State planning board projects	Other planning board projects	Total
Federal funds.....	\$9,238,906	\$15,593,739	\$24,832,645
Sponsors funds.....	1,375,333	3,455,372	4,830,705
Total funds.....	10,614,239	19,049,111	\$29,663,350

Although tabulations are not available, it is probable that an equivalent volume of projects has been conducted that are relevant to planning activities but have not been undertaken directly for planning agencies.

A mass of basic information has been gathered that is of value to the work program and can be utilized by local planning agencies. Procedures developed by

W. P. A. in conducting these projects can be of assistance to planning boards in carrying on their work.

These projects have also provided examples of the sort of work that needs to be done in the field of planning. Basic-data surveys, for instance, can help to provide answers to such problems as community needs for streets, schools and other public buildings, sewers, grade-crossing elimination, recreational and other facilities; the probable or approximate extent of such needs in 5, 10, or 20 years; and the economic and social factors involved in the community's problems.

Federal, State, and local governments are recognizing new functions as public responsibilities. Projects for indexing vital statistics records have resulted in the establishment of modern indexing systems in State, county, and municipal offices throughout the country. The operation of traffic surveys has pointed to shortcomings which have led many cities to accept new responsibilities regarding law enforcement, street designing, establishment of safe routes for school children, elimination of unnecessary traffic obstructions, and establishment of modern and accurate records of traffic violations. Public finance surveys, in establishing modern assessment methods, have resulted in new systems which are now being currently maintained by local governments.

The gathering of information that is essential to community planning is one of the most important tasks to which the clerical and engineering skills of large numbers of persons on W. P. A. rolls can be assigned. The great bulk of white-collar workers consists of young people with some high-school training and older people with long training and experience in clerical or professional occupations. The W. P. A. has found that one of the most advantageous ways of providing employment for such persons is to utilize their training on projects to collect data that are required by planning agencies.

Among the specific types of white-collar workers who are employed on research and records projects are the following: draftsmen, technical engineers, librarians, reporters, teachers, abstracters, bookkeepers, accountants, auditors, cashiers, office-machine operators, stenographers, typists, and all other types of office workers. Persons from such occupations comprise about 8 percent of the employable relief population. It is important that their skill be preserved and developed by employment on suitable projects. There is probably no more potentially important work for such persons to be charged with than the collection of basic data to be made available to planning agencies and other bodies concerned with an ordered community development. The utilization of relief personnel for such purposes may prove to be one of the most important means of

developing a work program of maximum soundness and social usefulness.

Nearly all types of departments of State and local governments have served as sponsors of research and record projects. In addition, many universities, Federal agencies, and private research foundations have acted either as sponsors or co-sponsors. Sponsors' contributions are mainly in the form of supervision, materials, and funds for the publication of final reports.

The decisions that are required of local planning bodies can be intelligently made only on the basis of adequate statistical data describing the various problems. The validity and wisdom of decisions regarding community improvements is limited by the factual information that is the basis for such decisions. Conclusions based on scientific study will be more valid than conclusions based on haphazard personal observation. Information regarding community resources and community needs must be collected and organized in a fashion corresponding to the requirements of intelligent community planning. Basic-data records covering the various aspects of community development must be maintained if community improvements are to be selected in an orderly fashion.

The agencies of State and local government have lagged behind business enterprise in the maintenance of records that form the basis of decisions. By and large, local units of government have far less information regarding affairs under their management than is considered essential by well-organized business firms of comparable size.

Many communities have been hampered in their ability to plan because of the limitations imposed by work-relief uncertainties. Federal appropriations for the work program have been made on an emergency basis, and the volume of future appropriations has been uncertain within wide limits. Lack of advance knowledge as to the amount of the Federal contribution from year to year has been a handicap to communities in budgeting their costs. And serious limitations on the ability to plan have been imposed by limitations on the proportion of Federal funds that may be used for non-relief labor.

In many instances, projects have not been carefully selected because of the pressing necessity to provide immediate relief. Under such circumstances, the danger is that if plans and specifications for a particular project happen to be available, that project will be selected for operation, regardless of whether community needs might have been better served by selecting some other project.

Types of Projects

W. P. A. research projects that are relevant to local planning activities are of three types: (1) Collection

of basic data and general surveys of interest for comprehensive planning in a given locality; (2) studies useful in solving specific problems of concern to local planning agencies; (3) engineering surveys.

(1) **Collection of basic data and general surveys of interest for comprehensive planning.**—The following projects indicate certain types of surveys undertaken within this general category:

Annual report of the Municipal Housing Authority of the city of Schenectady, N. Y., 1936.—A descriptive, preliminary report of an extensive research program conducted by the Municipal Housing Authority of Schenectady, N. Y., as a prelude to a proposed housing and slum clearance project. Data have been assembled on population trends, housing facilities, building trends, social and economic conditions, traffic situation, bonded indebtedness, assessed valuations of property, tax delinquencies, etc.

Syracuse population, characteristics, and trends.—The average growth of the population (1890-1930) for the Syracuse metropolitan area, which includes four surrounding towns, has been greater than that of eight comparable eastern metropolitan areas; the growth curve, however, now begins to show a marked trend toward a stable if not declining population. Between 1931 and 1936, approximately 2,350 families moved from the city proper to the suburbs; the reverse movement involved only about 1,350 families. A decrease in the number of children in kindergartens amounted to 20 percent between 1929 and 1935. Tables and charts show age distribution, nativity, family mobility, birth rates and density, and size of family by census tracts.

Selected charts on industrial and educational trends for Cincinnati.—Res. Bur., Regional Dept. Econ. Security, Employment Center, Cincinnati, Ohio, Nov. 1936. Charts present data on occupational distribution for Cincinnati, 1890-1935; gainful workers by sex, industrial group and employment status, 1935; total population in 1935 by age and sex; index of employment, 1926-36.

Movements of families within the Cleveland Metropolitan District, 1933.

San Diego County, Calif.—Co. Plan. Comm., San Diego, Calif., 1937. A description of the topography, climate, principal drainage basins, growth and location of irrigated lands, water service, flood control, subdivision development, soils and recreational facilities in San Diego County, Calif., as a basis for county planning. (Tables, maps.)

"A twenty-year plan" for Shawnee County and the city of Topeka.—Topeka Engin. Club & Kans. State Plan. Bd., Topeka, June 1935. Recommendations for specific needs determined by surveys of public buildings, housing, zoning, airports, recreational facilities, streets

and highways, water supply and sanitary facilities, drainage and flood control, and Kansas River maintenance in Topeka, Kans., for a period of 25 years. (Tables, chart, map, diagram.)

A comprehensive city plan, Peoria, Ill.—Greater Peoria Civic Assn., Peoria, Ill., 1937. As a result of the growth of the city of Peoria, Ill., without a definite plan for physical improvements, several important streets outside the business district are too narrow and require widening, certain transit lines are too close together and involve duplications of service, some residential areas have no parks and playgrounds, and many school sites do not have adequate area and are not properly located to serve the future population. Planned improvements in streets, transit, transportation, public recreation, zoning, and civic art to accommodate an estimated growth in population from 92,106 in 1930 to 163,170 by 1960 are suggested. (Charts, maps, illus.)

Douglas County survey: Population movements and demonstrated needs of small communities.—Kans. State Plan. Bd., Topeka, 1934.

(2) *Studies useful in solving specific problems of concern to local planning agencies.*—Studies of this type are described below by major categories:

Urban land use and zoning.—Percentages of uses of land; defects in zoning regulations; collection of data required for enactment of zoning ordinances; effectiveness of existing zoning regulations; adaptation of street and park systems to current needs and conditions; alley surveys; ratios by districts between taxes paid and municipal services rendered.

Housing.—Real property inventories; data on population congestion, vacancies, violation of housing laws; interviews to determine desirable features in housing projects; surveys of all aspects of housing conditions.

Traffic.—Data on traffic density and origin of traffic; traffic flow maps; major causes of traffic congestion; accident surveys; highway intersection conditions; parking conditions; school child practices, etc.

Labor and employment.—Age, sex, and employment status of gainful workers; average unemployment rate for selected cities; industrial classification of unemployed workers; duration of unemployment; geographical and occupational mobility of gainful workers; economic aspect of Mexican agricultural labor.

Public finance.—Financial and related data for school districts, including trends in assessed valuation, current expenditures, etc.; trends in sources of revenue of State and local governments; assessed value and tax delinquency of real property; ability of selected counties to finance relief needs; income from and cost of municipal services for selected districts; municipal borrowing power; taxing ability of selected counties; development of a long-term program of capital expenditures.

Government.—Survey of the excessive number of local governments or taxing units in a metropolitan area and the benefits of consolidation; need for reorganization of county governments to increase efficiency, eliminate overlapping and duplication of functions; comparative costs of assessing and collecting property taxes in various counties; survey of the desirability and feasibility of county consolidation; management of properties acquired by tax title foreclosure; survey of criminal court procedure and time elapsed after cases are docketed; the size of beats assigned to patrolmen with respect to efficiency; survey of the fee system as a method of compensating county officials; survey of factors bearing on the consolidation of cities in a metropolitan area; survey of municipal refuse disposal; investigation of zoning administration in selected cities.

Recreation.—Survey of all public parks, playground, and school acreage in a metropolitan area; survey of the adequacy of recreational facilities with respect to congestion of population; study of delinquency rates with respect to proximity of community centers; study of the adaptability of an area to development for recreational purposes; city-wide survey of the recreational preferences of youth.

Social problems and social agencies.—Social statistics on relief cases: Age, cause of need, former occupations, reasons cases were closed; sociological analysis of relief families; incidence of relief by skills, occupations, nativity, size of family and amount of schooling; survey of violations of parole; survey of juvenile delinquency; survey of the incidence of tuberculosis; survey of health conditions; survey of comparative procedures for dealing with wayward minors; study to prevent duplication among clinics; economic status of clinic patients; surveys of the effectiveness of a syphilis-control program; study of recording methods in administering public-welfare programs.

Education.—Survey of school building adequacy by counties; State-wide survey of local school units; survey of population trends to determine plans for construction of new schools; safety survey of school child pedestrian traffic; survey of local school attendance and proposed reorganization to reduce the number of small schools; survey of transportation of pupils in school busses; State-wide survey of public schools; percentage of school attendance by age groups, average per-pupil cost by counties, teacher salaries and length of service, etc.; survey of population trends to determine future requirements for education and recreational facilities; outline of the basis for raising and distributing school funds.

(3) *Engineering surveys.*—This term, as used in this text, covers the sort of surveys ordinarily made by civil engineers and land surveyors with the use of

surveying instruments and accessory equipment. Since the beginning of the W. P. A. program, more than one-fourth of total expenditures on study and survey projects has been in the field of engineering surveys. The fact that over three-fourths of the projects in this category have involved survey operations in urban areas is a reflection of the concentration in urban areas of unemployed workers capable of assisting in such projects; it also indicates the need for such surveys in urban planning and activities.

The W. P. A. engineering-survey projects are sponsored by the various departments of the Federal, State, and local governments. Sponsors usually include surveying or mapping agencies; local and State departments of public works; city, township, and county engineers; State colleges and universities; State highway and conservation departments; and various other agencies concerned with the use or preparation of basic surveys, maps, and studies. The contribution of the sponsoring agency usually consists of all or part of the required supplies, materials, and of competent technical supervision.

There are still hundreds of cities and towns that do not have sufficiently accurate surveys and adequate maps with which to carry on their normal activities efficiently and economically. Entire counties and sections of States are still unmapped. Several States have been forced to prepare inaccurate stop-gap maps of roads and highways by methods that have been considered obsolete for many years. Many coastal and other strategic areas need to be mapped, and revisions need to be made of available maps. This general lack of maps and basic data is detrimental to economical and sound planning.

With the assistance of W. P. A., it has been possible to prosecute an extensive program of surveys through the operation of local and State-wide projects. Although these engineering-survey projects are primarily professional undertakings, they employ unskilled, intermediate, and skilled personnel in addition to professional and technical workers.

Geodetic control.—Fourteen State-wide geodetic-control survey projects operating under the W. P. A. program have been continued from previous Federal work programs. The work on these projects includes the establishing of horizontal and vertical control (triangulation, traverse, and levels) to supplement the normal work of the United States Coast and Geodetic Survey. Final results for the first State, entitled Geodetic Survey of Georgia, were published in book form in 1938. The outstanding survey of this character for an urban area is in process in the city of Boston.

Topographic surveys.—There are many types of topographical maps in process in various areas, including parks and playgrounds, public institutions, airports,

cities, townships, counties, and States. Typical projects of this type are being conducted in Hennepin County, Minnesota; Pittsburgh, Pennsylvania; and the entire State of Florida.

Boundary surveys.—The hundreds of projects of this type being operated include the restoration and monumenting of boundaries of cities, townships, counties, States, section lines, streets, roads, cemeteries, parks and playgrounds, public institutions, etc. Specific examples are the Iowa State-wide project involving the restoration and monumenting of section lines, a survey of the State boundary line between Connecticut and Rhode Island (prosecuted by the Connecticut Geodetic Survey), and the street-line survey in the city of Boston.

Riparian, stream, and hydrographic surveys.—Typical projects of this type are the hydrographic survey under way in Salem, Mass. (for the U. S. Coast Guard), and the riparian, stream, and waterway survey operating on a State-wide basis in New Jersey.

Underground structure surveys.—Projects of this type involve the mapping of public and private utilities located within the street, road, or other public-property boundaries. They include the horizontal and vertical locations, conditions, type, and other physical characteristics of sewer, water, and gas lines, conduits, etc.

Cross-section and profile surveys.—An example of a project of this type exists in Warwick, R. I.; it involves the running of cross sections and profiles of existing streets.

Drainage and flood control.—Although some of the projects of this type are coded as topographic maps, there are other projects which include the determining of the drainage areas as the major objective. There are also various projects to determine the location of drainage structures. The following types of projects may be classified in this category: A roof drainage survey to determine the amount of water drainage into sanitary and storm sewers; a survey for location, physical characteristics, and history of drainage ditches; a project for flood control involving examinations and surveys in basins of important rivers in Vermont, New Hampshire, Massachusetts, Connecticut, and Rhode Island.

General engineering mapping.—A typical project of this type is the survey operating in San Francisco where a set of block maps is being prepared to show land use, building structures, utilities, etc. There are also numerous projects where the major objective is to prepare a base map.

Plans of existing public buildings.—Projects of this type involve field and office surveys preliminary to revising existing building plans and drawing new floor plans of existing buildings.

Mineral, water, and land resources.—An example in this category is the Arkansas State-wide project to

locate, describe, test, estimate, and map accessible resources, such as construction materials, minerals, water tables, etc.

Miscellaneous.—Projects that cannot be classified under the above headings include such types as the following: A sidewalk, downspout, and tree survey operating in Campbell, Ohio; construction of various relief models and maps; projects on which the control surveys executed under previous programs are being finally computed and adjusted. These computing projects are being operated with the cooperation of the United States Coast and Geodetic Survey.

Through the assistance of W. P. A., all types of engineering-survey projects can be operated. The key to successful operation is competent supervision, which is the responsibility of the sponsor. Competent supervision creates greater interest in the work on the sponsors' part and trains the personnel in useful techniques that can be utilized in private employment. With proper supervision, valuable results can be obtained with workers available from relief rolls, and fluctuations among the personnel in the lower brackets has little effect on the final results. Unit costs are materially increased, however, in those instances where extensive training of the workers is necessary. When sponsors avail themselves of this proffered assistance from W. P. A., the result is twofold: Valuable basic data are made available to planning agencies, and needy persons receive worth-while employment.

The data gathered through the various types of projects that have been discussed, and the procedures developed in gathering such data, should be put to use. These W. P. A. projects end with the collection of facts; these facts must be utilized by agencies that are responsible for planning. There must be further extension of planning activities from the theoretical to the application stage. A primary purpose of this report is to make all State and local planning boards familiar with the surveys that individual planning boards have conducted with W. P. A. assistance.

Furthermore, there is need for closer integration of the fact-gathering activities carried on by various local, State, and Federal agencies. The work undertaken on projects prosecuted with W. P. A. assistance is not planned by W. P. A. but is set up in accordance with local needs as determined by the project sponsor. Determination of whether the work fits into a well-planned program has been the responsibility of the sponsor. Project applications for engineering surveys, for instance, receive an engineering review and are checked with regard to conformance with current regulations, but this review is restricted to the work proposed without attention to what should be done. Although much has been accomplished, in many instances projects have been initiated primarily to provide jobs for needy per-

sons, with too little consideration regarding the requirements of long-time comprehensive planning.

If a definite plan were initiated on a nation-wide basis whereby the sponsoring agencies were advised as to what should be done in order to conform to local and national planning needs, more direct benefits could be obtained. The projects submitted would be an integral part of a well-planned community or nation-wide program. Once an operating sequence was established, the work could be temporarily terminated or curtailed without affecting that which had already been completed. Local communities could satisfy both immediate and future planning needs and at the same time contribute materially toward alleviation of the unemployment problem.

Local Planning Data and Information Available

An Index of Research Projects has been published by the Works Progress Administration. Volume I of this Index contains a summary of the results of research projects undertaken under the auspices of the Civil Works Administration, the several State Emergency Relief Administrations, and the Works Progress Administration. Volume II, published in collaboration with the National Resources Committee and State planning agencies, is restricted in general to analytical research reports prepared by regional, State, and local planning organizations. Substantial numbers of the research activities indexed in volume II have been made possible by the use of the personnel of work-relief projects undertaken under the auspices of the Federal Emergency Relief Administration and the Works Progress Administration. Volume III, bringing the Index up to date, should be available for distribution shortly. The three volumes of the Index contain a total of over 5,000 entries. Information regarding the availability of reports of the results of the research projects indexed is contained in the Index itself.

Research Monographs

1. Six Rural Problem Areas, Relief—Resources—Rehabilitation.
2. Comparative Study of Rural Relief and Non-Relief Households.
3. The Transient Unemployed.
4. Urban Workers on Relief.
5. Landlord and Tenant on the Cotton Plantation.
6. Chronology of the Federal Emergency Relief Administration, May 12, 1933, to December 31, 1935.
7. The Migratory-Casual Worker.
8. Farmers on Relief and Rehabilitation.
9. Part-Time Farming in the Southeast.
10. Trends in Relief Expenditures, 1910-1935.
11. Rural Youth on Relief.
12. Intercity Differences in Costs of Living in March 1935, 59 Cities.
13. Effects of the Works Program on Rural Relief.
14. Changing Aspects of Rural Relief.
15. Rural Youth: Their Situation and Prospects.
16. Farming Hazards in the Drought Area.
17. Rural Families on Relief.
18. Migrant Families.

Special Reports.

Legislative Trends in Public Relief and Assistance, December 31, 1932, to July 1, 1933.

Survey of Cases Certified for Works Program Employment in 13 Cities.

Survey of Workers Separated From W. P. A. Employment in Eight Areas During the Second Quarter of 1933.

A Survey of the Transient and Homeless Population in 12 Cities, September 1935 and September 1936.

Areas of Intense Drought Distress, 1930-1933.

The People of the Drought States.

Relief and Rehabilitation in the Drought Area.

Five Years of Rural Relief.

Age of WPA Workers, November 1937.

Survey of Workers Separated From W. P. A. Employment in Nine Areas, 1937.

Workers on Relief in the United States in March 1935, Volume I, A Census of Usual Occupations.

Urban Housing: A Summary of Real Property Inventories Conducted as Work Projects, 1934-1938.

Standard Technical Procedure Circulars.

Compilation of Property Identification Maps. Technique for the preparation of property maps, assignment of property identification numbers, and cross-indexing to an ownership file.

Index of Deeds, Mortgages, and Other Encumbrances. Technique for the preparation of an index of deeds, mortgages, and other encumbrances by property location.

Real Estate Activity Surveys: A Limited Survey of Deeds and Mortgages Recorded in a Recent Period. Technique for transcribing, tabulating, and summarizing data obtained from deed and mortgage transcriptions.

Pedestrian Traffic Volume Counts. Technique for counting pedestrians crossing streets at intersections and those on sidewalks between intersections and presenting these data in graphic form.

Real Estate Activity Surveys: Trends of Deeds and Mortgages Recorded in a Long-Term Period. Technique for transcribing, tabulating, and summarizing data obtained from deed and mortgage transcriptions.

Technique for Real Property Survey. Tabulation instructions for dwelling survey. (This circular is part II of the original procedure of the same name issued jointly by the Federal Housing Administration and the Coordinating Committee of the Central Statistical Board and the Work Projects Administration, July 19, 1935.)

Real Estate Activity Surveys: An Intensive Analysis of Deeds and Mortgages Recorded in a Recent Period—Volumes I and II. Technique for transcribing and tabulating data obtained from real estate appraisal records and for an intensive analysis of these data and of data obtained from deed and mortgage transcriptions.

Selecting Safest Routes for Elementary School Children. Technique for compiling data indicating traffic hazards and protection to children walking to and from school, and mapping the safest routes to travel, with guiding principles for selecting the safest routes.

Low Income Housing Area Survey. Technique for securing and tabulating data on composition, income, and expenditures for household facilities of families living in dwelling units found to be substandard.

An Outline of Surveys in the Field of Real Property and Housing. Suggestions for a coordinated program of real property and housing surveys.

Index of Research and Statistical Data. A circular offering suggestions for compiling an inventory of available research and statistical material.

Definition of Police Beats. Procedure for making a study of uniformed patrolmen throughout a municipality to obtain a maximum of protection for persons and property with the available force.

Indexing Vital Statistics Certificates. Technique for making a cross-index file by names to original vital statistics certificates; for preparing the temporary alphabetic card index file; and for converting the temporary card file into a permanent ledger index.

Survey of Traffic Obstructions.—Technique for locating and recording obstructions to vehicular and pedestrian traffic, with suggestions for making improvements.

Installation of a Real Property Tax Record Card. A circular presenting the technique for installing a unit ledger system of real property tax accounting, with special reference to the recording of delinquent accounts; suggestions for the use of mechanical aids in tax-accounting control; and a brief review of selected tax-delinquency projects.

Inventory of Physical Properties of Electrical Utilities. A circular presenting the technique for compiling an inventory of the physical properties of electrical utilities operating within a State.

INDEPENDENT AGENCIES

CENTRAL HOUSING COMMITTEE

Informal Executive Memorandum of August 29, 1935

General Introductory Statement

The Central Housing Committee is an informal inter-agency coordinating body, formed to provide correlation and cooperation between the Federal agencies concerned directly or indirectly with housing, construction, and finance. The Committee receives no regular appropriation: Services of committee secretaries, editorial and clerical assistants are donated by the various member agencies.

General Statement of Function

The function of the committee is to bring about intelligent research in the field of housing, an exchange of ideas, data and experience, and a better understanding of interagency problems. The committee includes the administrative heads of the following agencies:

- Department of Commerce, Bureau of Standards.
- Farm Credit Administration.
- Farm Security Administration.
- Federal Home Loan Bank Board.
- Federal Housing Administration.
- Office of Government Reports.
- Public Buildings Administration.
- RFC Mortgage Company.
- United States Housing Authority.

In addition to the central committee proper, principal technical assistants drawn from different agencies function through the 8 principal committees listed below and 25 subcommittees of specialized interests and elastic membership (including nonmember agencies) which make generally available the results of their joint studies or compilations.

- Appraisal and Mortgage Analysis.
- Economics and Statistics.
- Land Use and Site Planning.
- Law and Legislation.
- Operation and Management.
- Public Relations.
- Research, Design, and Construction.
- Rural Housing.

Activities Affecting and Assistance to Local Planning

The Central Housing Committee has no direct connection with either housing or planning as an action

agency, although indirectly the informal discussions of its members affect the action programs of certain of the agencies. As a research body, through its publications and compilations or studies of its committees and subcommittees, the Central Housing Committee does initiate, prepare or compile studies which are of value to local planning as research and information, particularly in the field of housing.

The committee, through its executive secretary, is prepared to advise local planning agencies as to where and how to procure material relative to the housing field and its various planning aspects, and to furnish reference material developed by its various technical groups.

Local Planning Data and Information Available

(Bibliographies: Legal Reports and Uniform Acts: Discussion Papers: Miscellaneous)

- 1936. Methods of Housing Finance in the United States and Abroad.
- 1936. Cooperative & Joint-Ownership Housing in the U. S. & Abroad.
- 1936. Limited-Dividend Housing in the United States.
- 1936. Catalog of Public Documents in Housing Research. (Out of print.)
- 1937. References on Prefabricated Housing. (In process of revision.)
- 1937. Urban Real Estate Appraisal (Hasse).
- 1937. Rural Real Estate Appraisal Data Sources (Porter).
- 1937. Urban Real Estate Appraisal Data Sources (duBois).
- 1936. Foreclosure Procedure and Moratorium Legislation. (Uniform Real Estate Mortgage Act--in preparation.)
- 1936. The Problem of Slum Areas.
- 1936. The Administration of Tax Payments. (Uniform Act in preparation.)
- 1936. Loan Closing and Land Title Procedure. (Uniform Act in preparation.)
- 1937. Forms of Title Evidence, 1937. Proposed Federal Acts.
- 1938. Mechanics' Lien Laws. (Uniform Act in preparation.)
- 1936. University Research in Housing as a Field of Study. (Out of print.)
- 1937. British Government in Housing (Bassin): Housing in England (Reed).
- 1937. Housing and Town Planning (Unwin).
- 1938-9. International Housing Statistics: Basic statistics in population and housing censuses annotated: France, Germany, Great Britain, Sweden.

1939. Principal Federal Agencies Concerned with Housing. (Chart of Functions, Limitations, and Authorizations.)
1939. Technical Activities of Government Agencies Concerned with Housing.
1940. Government Team Work in Housing: by Hon. Wm. B. Bankhead.
1940. In preparation: Revision of Glossary of Housing Terms; Federal Services to Home Owners and Tenants; Landscape Architects Handbook; Technical Digests.
- 1940 Discussion Papers:
- Rural Housing (Alexander).
 - The Place of Housing in Employment (Ezekiel).
 - The Registered House (Dunning).
 - Lessons from Wartime Housing (James).
 - Health, Heating and Housing (DallaValle).
- Housing Index-Digest (semi-monthly). Reference guide to current American and foreign housing literature.
- Housing Legal Digest (monthly). Decisions; Opinions; Legislation.

General housing literature	City data	Statistics
1936. Nos. 1, 2, 3, 4, 5, 6, 7, 8, 9, 10.	(Vol. I).....	11/12 (U. S. Laws).
1937. Nos. 1, 4, 15, 16.	(Vol. II) No. 2.....	19 (U. S. Laws).
1938. Nos. 1, 4, 10, 12, 14, 16, 18.	(Vol. III) Nos. 1, 2, 11, 15, 17, 19.	3 (Germany).
1939. Nos. 1, 2, 6, 7.	(Vol. III) Nos. 4, 8.	23 (United Kingdom).
1940. Nos. 6, 11, 13, 15, 17.	Nos. 10, 12, 14, 16.	2 (France), 6 (Sweden).

1936. 29 issues.

1937. 12 issues.

1938. 11 issues.

1939. 11 issues—September Supplement—Annual summary of State and Federal laws relating to public and private housing.

1940. 6 issues.

The distribution of the housing index and legal digests limited to housing agencies and organizations, libraries, and educational institutions, city data issues on special order only.

CIVIL AERONAUTICS AUTHORITY¹

Civil Aeronautics Act of 1938, approved June 23, 1938 (Public 708, 75th Cong., 3d sess.).
Executive Order 7959 of August 22, 1938.

Brief General Statement of Agency Functions

The Civil Aeronautics Authority is a quasi-judicial and quasi-legislative body, set up for the regulation and encouragement of the aviation industry.

The Authority regulates all the air lines in the United States and its territories. In addition, the Authority regulates the operations of all charter and fixed base airplane operators in the nation and territories. Furthermore it is charged with overseeing the activities of the certified repair stations, certified aviation schools, all the aircraft and engine manufacturers and often the activities of some 1,700 firms engaged in one or more phases of the aeronautical industry.

The Authority not only regulates these companies and institutions, but also the activities and operations of individual pilots, ground personnel, and aircraft. There are approximately 12,000 certified civil aircraft over which the Authority must keep careful watch. At the present time, there are 61,000 pilots in the United States and of this figure only about 1,500 are air-line pilots. Finally, there are more than 10,000 certified mechanics and an additional thousand certified parachute riggers, ground instructors, traffic control operators, and dispatchers. All these aircraft and all these individuals must, under the law, have individual certificates, individually tested, inspected, and regulated.

The Civil Aeronautics Authority constructs and maintains the civil airways and air navigation facilities used by those who operate planes for business or pleas-

ure, and by our military and naval air forces. This responsibility extends to the broadcasting stations, radio-range stations, radio-marker beacons, and 34,334 miles of teletypewriter service with 333 stations. It extends to the revolving beacon lights, flashing beacon lights, lighted intermediate landing fields, and 25,000 miles of lighted airways which cover the country.

The duties of the Authority extend beyond the regulation of the air lines. More than 80 percent of the total employees of the Authority are engaged in the maintenance and construction of air navigation facilities, and not in the work of regulation.

Activities Affecting and Assistance to Local Planning

Those activities of the Authority which affect local planning come under the field organization of the Airport Section. This field organization maintains regional airport engineers in all the civil aeronautics regional offices and in addition each region is divided into two or more districts in charge of associate airport engineers. As a rule the districts comprise three States and the headquarters, insofar as possible, are located centrally within the territory.

The primary purpose of the field staff is to assist communities with the solutions of their airport problems. These problems may range from the selection of an airport site, the planning of work necessary to develop this site—including the general layout of facilities, drainage, grading, soil analysis, and specifications for runway paving, design and location of buildings, and the design and construction of airport-lighting systems—to zoning legislation necessary to protect the airport.

¹A statement on the Civil Aeronautics Authority, as reorganized June 30, 1940, is included at the end of this section on page 133.

The services of the Airport Section representatives are available without charge to all individuals, cities, or corporations who anticipate construction or improvement of airports.

Through financial surveys conducted annually of the civil airports of the United States, data is available to cities regarding the probable cost of maintaining and operating airports in communities of various sizes.

Apart from these advisory and consultant services, the Airport Section through its field representatives is charged with the technical supervision of all airport improvements made possible through the expenditure of Federal funds, except where such funds are for the purpose of improving military airdromes.

In addition to these engineering services, the assistance of the Airport Section is also available to adjacent communities which desire to cooperate in the establishment of joint airports. Many such communities are served at the present time by inferior airports which cannot be expanded to serve the needs of the communities properly. Preliminary negotiations toward a cooperative effort may be conducted through the Airport Section which would result in the establishment of an airport facility serving the aviation needs of the communities more economically than by individually owned or maintained airports.

The Airport Section cooperates with State planning boards and State aviation commissions, where they exist, in the creation of State plans for airport development in order that these plans may become units of a coordinated national system of airports.

Local Planning Data and Information Available

Air Commerce Bulletin.—The Air Commerce Bulletin, published on the 15th of each month, carries articles, news items, and statistics dealing with civil aeronautics; information as to certificates and approvals issued by the Authority; and notice of issuance of any new or revised regulations and publications issued by the Authority. News of Civil Aeronautics Authority projects is emphasized, but other information is also carried, with particular reference to scheduled and miscellaneous aircraft operations, accidents, and aircraft production. Subscription price in the United States of America 50¢ annually, 70¢ in foreign countries. Single copies 5¢. Superintendent of Documents, Government Printing Office, Washington, D. C.

Civil Aeronautics Bulletin. No. 10, Airport Lighting, Sept. 1, 1933.

Aeronautics Trade Directories. Current lists of firms engaged in aeronautical activities are available upon request. Request the list of companies engaged in the specific activity or manufacturing the specific commodity concerned.

Lists of Aeronautic Publications. Current lists of publications on various aeronautical subjects available upon request. Ask for list of publications on subject concerned.

Development Reports. No. 6, Survey of State Airport Zoning Legislation.

Publications of the Former Bureau of Air Commerce. *Aeronautics Bulletin.* No. 13, State Aeronautical Legislation

Digest and Uniform State Laws. (Being revised. To be reissued as C. A. Bulletin No. 4.)

Airways Bulletins. No. 2, Descriptions of Airports and Landing Fields in the United States, Jan. 1, 1933. (1939 Revision being prepared. To be reissued as C. A. Bulletin No. 11.)

Map. Airway Map of the United States, Nov. 1, 1933.

Safety and Planning Reports. No. 7, Development of a Safety and Planning Program. April 1933.

Lists of Civil Air Regulations. (Aircraft, Airmen, Air Navigation Facilities, Air Carriers, Air Agencies, Air Navigation Within and Without the U. S., Miscellaneous and Amendments, May 1, 1933.)

Agency Functions Affected by Reorganization

Since the preparation of the manuscript of "Federal Aids to Local Planning," certain changes have been effected with respect to the Civil Aeronautics Authority, in accordance with the President's Reorganization Plan No. 4.

Effective as of June 30, 1940, the functions of the office of the Administrator of Civil Aeronautics were transferred to the Department of Commerce; (2) the offices of the Members of the Air Safety Board were abolished; and (3) the Civil Aeronautics Board, into which were consolidated the functions of the Air Safety Board, was created and placed within the framework of the Department of Commerce—all of its functions to be exercised with complete independence of the Secretary of Commerce.

Civil Aeronautics Board.—The Board retains (1) the functions of economic regulation, including the issuance, modification, suspension, revocation, or transfer of certificates of public convenience and necessity to air carriers and permits to foreign air carriers; (2) the fixing of rates for the transportation of passengers and property by air; (3) the supervision of interlocking relationships between air carriers and others in the aeronautical industry, passing upon contracts between air carriers affecting air transportation in certain ways, and the prescription and enforcement of such rules and regulations as are necessary to insure the efficient, economical, and honest management of the air carriers.

The Board will also retain the functions of suspending and revoking safety certificates (pilot, mechanic, air carrier operating, type, production, airworthiness, and others), after hearing, including the disposition of any petition for the reconsideration of a denial of an application for the issuance or renewal of an airman certificate by the Administrator.

The accident investigation and related functions, formerly exercised by the Air Safety Board, come within the jurisdiction of the Civil Aeronautics Board, and a staff will be maintained in Washington and in the field to assist in this work.

Office of the Administrator of Civil Aeronautics.—This office has control over the construction and

maintenance of the civil airways and air navigation facilities used by those who operate planes for business or pleasure, and by our military and naval air forces. This responsibility extends to the broadcasting stations, radio-range stations, radio-marker beacons, and 38,500 miles of teletypewriter service with 494 stations. It extends to the revolving beacon lights, flashing beacon lights, lighted intermediate landing fields, and miles of lighted airways which cover the country.

The Administrator is responsible for the administration of the Civilian Pilot Training Act of 1939. The

Private Flying Development Division, through its field representatives, operates in an advisory and consultant capacity, and is charged with the responsibility of the safe completion of the controlled civilian pilot training program, which will train a quota of 45,000 pilots, during 1940, in approximately 500 college and 800 non-college units throughout the United States.

Activities affecting and assisting local planning remain substantially the same as before the reorganization of the Authority. They continue to be conducted by the Field Organization of the Airport Section, now in the Office of the Administrator of Civil Aeronautics.

FEDERAL POWER COMMISSION

Federal Water Power Act of June 10, 1920 (41 Stat. 1063, 16 U. S. C. 791-823).

Federal Power Act of 1935 (Title II of the Public Utility Act of 1935, 49 Stat. 808), approved August 26, 1935.

Flood Control Act of 1938 (52 Stat. 1215).

Natural Gas Act (52 Stat. 821), approved June 21, 1938.

Bonneville Act of August 20, 1937 (Public, No. 329, 75th Congress, 1st Session).

Fort Peck Act of May 18, 1938 (52 Stat. 403).

Amendment to Tennessee Valley Authority Act approved August 31, 1935.

Brief General Statement of Agency Functions

The Federal Power Commission was created by Congress in 1920 to provide for the conservation and most effective utilization of the Nation's water power resources. Its duties were enlarged by the Federal Power Act of 1935, which extended its jurisdiction over the interstate movement of electric energy and companies engaged therein, and by the Natural Gas Act, passed in 1938, extending its jurisdiction over the interstate transportation and sale of natural gas. In administering the Federal Power Act and the Natural Gas Act, it cooperates closely with State agencies and municipalities. The Commission is primarily a regulatory agency charged with licensing and supervising power projects and water power development on the public lands of the United States, and on streams under the control of Congress, and with the regulation of electric energy and natural gas transmitted in interstate commerce. The Commission reports regularly the generating capacity and production of all electric power plants; and the rates for electric service throughout the United States. Surveying the undeveloped water power resources of the country, it has reported power sites on each stream that are capable of economical development.

Activities Affecting and Assistance to Local Planning

Electric Power.—Under its general investigatory powers, the Commission is directed to conduct investigations regarding the generation, transmission, distribu-

tion, and sale of all electric energy, however produced, throughout the United States and its possessions, whether or not otherwise subject to the jurisdiction of the Commission.

The Commission is required to collect, compile, and keep current information regarding the ownership, operation, management, and control of all facilities used for such generation, transmission, distribution, and sale of electric energy; their capacity and output, and the relationship between the two; the cost of generation, transmission, and distribution; the rates, charges, and contracts in respect to the sale of electric energy and its service to residential, rural, commercial and industrial consumers and other purchasers, by private and public agencies; and the relation of any or all such facts to the development of navigation, industry, commerce, and the national defense.

The results of such investigations must, the statutes require, be reported to Congress. These reports of power development and undeveloped resources and the operating and financial data of utilities have made accessible to State Commissions and State planning agencies a large body of essential information not before available.

Development of Water Resources.—Congress, in creating the Commission, specifically authorized it to make investigations concerning the water resources of any region in order to assure that all project plans be those best adapted to a comprehensive plan of development of such water resources for all beneficial public uses. Extensive studies of integrated river

planning are, therefore, among the continuing assignments of the Commission's engineering staff. By special arrangement, the Commission has enabled State and local agencies concerned with river basin development to utilize information collected in the course of such studies.

Licensing.—All licenses issued under the act shall be on condition "That the project adopted, including the maps, plans, and specifications, shall be such as in the judgment of the commission will be best adapted to a comprehensive scheme of improvement and utilization for the purposes of navigation, of water-power development, and of other beneficial public uses; and if necessary in order to secure such scheme the commission shall have authority to require the modification of any project and of the plans and specifications of the project works before approval."

States and municipalities are given preference in the consideration of applications for water power project licenses, provided their plans are equally well adapted as any others proposed, to develop the navigation and water resources of the region. Projects which, in its judgment, should be undertaken by the United States Government are investigated by the Commission, whose findings are reported to Congress.

National Power Survey and Continuing Studies.—America's first national power survey, covering the country's available power facilities and its undeveloped power resources capable of economic utilization, as well as the future national power requirements and future markets for electric energy, was made by the Federal Power Commission in 1933, 1934, and 1935.

By Executive Order No. 1625, issued August 13, 1933, President Roosevelt directed the Commission to make a survey "of the water resources of the United States as they relate to the conservation, development, control, and utilization of water power; of the relation of water power to other industries and to interstate and foreign commerce; and of the transmission of electrical energy in the United States and its distribution to consumers," and on the basis of this survey to "formulate a program of feasible and desirable public works."

Studies of the undeveloped water power resources of the United States, made by the Commission's engineers in the national power survey, disclosed the existence of 1,863 water power sites, capable of producing, if fully developed, some 275 billion kilowatt-hours output annually.

The Commission carries on a continuing study of future power requirements in relation to available generating capacity, on both a country-wide basis and by power supply areas. This study today takes account of possible defense needs as well as normal growth in

demand. Data on power requirements and capacity are available for the use of State planning agencies.

Cooperation.—Cooperation with State commissions is provided in the Federal Power Act, and the Commission is directed to make available to the several State commissions such information and reports as may be of assistance in State regulation of public utilities. Any matter arising in the administration of part II of the act may be referred to a board composed of a member or members from the State or States affected. Conferences are authorized with State commissions regarding the relationship between rate structures, costs, accounts, charges, practices, classifications, and regulation of public utilities subject to the jurisdiction of State and Federal commissions, and joint hearings with State commissions in connection with any matter with respect to which the Federal Power Commission is authorized to act.

State commissions are notified promptly of any order, action, or proceeding before the Federal Commission in which they may be interested or concerned. In turn, they are requested to inform the Power Commission of any matter coming before them which may have a Federal interest.

Natural Gas Cooperation.—Similar provisions for cooperation with State commissions respecting interstate natural gas utilities are set forth in the Commission's "Provisional Rules of Practice and Regulations under the Natural Gas Act."

Exercising regulatory powers over natural-gas companies engaged in interstate commerce, in the interstate transportation of natural gas or its resale for ultimate public consumption, the Commission is also authorized to investigate and ascertain the actual legitimate cost of these companies' properties, the depreciation therein, if necessary for rate-making purposes, and any other facts which bear upon a determination of a proper rate base.

Upon its own motion or upon the request of a State commission, the Commission may investigate and determine the cost of producing or transporting natural gas by a natural-gas company in cases where the Commission has no authority to establish a rate governing the transportation and sale of natural gas by such company.

The Commission is authorized to cooperate with State commissions, and to assemble pertinent information in connection with State compacts dealing with the conservation, production, transportation, or distribution of natural gas.

Authority is delegated to the Commission to prescribe proper and adequate rates of depreciation and amortization of the several classes of property of each natural-gas company under its jurisdiction, used or useful in the production, transportation, or sale of natural gas.

After hearing, the Commission may determine the adequacy or inadequacy or natural-gas reserves, and may determine the propriety and reasonableness of the inclusion in operating expenses, capital, or surplus, of all delay rentals or other forms of rentals or compensation for unoperated lands and leases.

The Commission is empowered to require any natural-gas company, subject to its jurisdiction, to extend or improve its transportation facilities, or to establish physical connections of its facilities with those of, and to sell gas to, any person or municipality engaged in local distribution of natural gas. No natural-gas company can abandon any of its facilities or service which are subject to the Commission's jurisdiction without the prior approval of the Commission.

The Commission is authorized and empowered to issue certificates of public convenience and necessity to any natural-gas company which proposes to construct or extend its facilities into a market already being served by another natural-gas company.

Interconnection and Coordination of Power Facilities.—The Commission, in order to assure an abundant supply of electric energy, with the greatest possible economy, and with regard to the proper utilization and conservation of natural resources, is directed to divide the country into regional districts for the voluntary interconnection and coordination of electric facilities. Before establishing any such district, the Commission is directed to afford the State commission of each State affected an opportunity to present its views and recommendations.

Upon application of a State Commission or of any person engaged in the transmission or sale of electric energy, the Commission may, after notice to each State Commission and public utility affected, order interconnections to be made and energy to be exchanged, if, after hearing, it finds such action to be in the public interest. In case of war or other emergency, the Commission has authority to order emergency interconnections and exchange of power, with or without notice, hearing, or report.

Protection of Power Facilities in Floods and Other Emergencies.—Failure of electric light and power proved one of the most disastrous features in the floods along the Ohio River in 1937. In cooperation with the Kentucky Public Service Commission and the utilities operating in States along the river and its tributaries, the Federal Commission made a detailed engineering study of the causes of power failure and the requirements for maintenance of continuous and ample light and power service under the most adverse flood conditions. As a result, numerous improvements and additions were made which will assure far better protection for these communities than was possible before. The results of this study were embodied in a two-volume

joint report, issued by the two commissions in 1938, on "Protection of Power Supply in Kentucky During Ohio River Floods." This covered in detail engineering studies of the principal flood areas in Kentucky, Ohio, Indiana, Illinois, and West Virginia, from Huntington, W. Va., to Cairo, Ill.

Provision for Power in Flood Control Projects.—Furnishing to its duties under the Flood-Control Act of 1938, the Commission investigates the hydroelectric power potentialities of all authorized Federal flood control and reservoir projects. The act provides (sec. 4):

"That penstocks or other similar facilities adapted to possible future use in the development of hydroelectric power shall be installed in any dam herein authorized when approved by the Secretary of War upon the recommendation of the Chief of Engineers and of the Federal Power Commission."

A Division of Power-Flood Control Surveys has been established by the Commission to carry out these duties, and the power possibilities of many proposed projects have been examined.

Bonneville and Fort Peck Projects.—Rates for electric power generated by the Bonneville project on the Columbia River, near Portland, Oreg., are, under the act approved August 20, 1937, to be based on an allocation by the Federal Power Commission of that proportion of the cost of this project properly chargeable to power facilities. Schedules of rates and charges for the sale of this energy prepared by the administrator are subject to confirmation and approval by the Commission.

Under the act of May 18, 1938, the Commission is entrusted with similar duties in connection with the Fort Peck project located on the Missouri River near Fort Peck, Mont.

Cooperation with States in Investigating Power Resources.—The Commission is authorized to cooperate with State as well as national agencies in conducting investigations of power resources and of the water power industry and its relation to other industries and to interstate and foreign commerce. Working in close cooperation with State agencies, as well as with the United States Geological Survey, The Bureau of Reclamation, the Forest Service, and the Army Corps of Engineers, the Commission's studies and surveys have been and are of value to local planning agencies concerned with the conservation and development of water, power, and natural gas resources.

State and local planning agencies will find substantial suggestions looking to the development of natural resources, to be utilized in the electrochemical and electrometallurgical industries, in the study made by the Commission embodied in its report on "Power Requirements in Electrochemical, Electrometallurgical, and Allied Industries." Revealing the use of 13,324,000,000 kilowatt-hours of electric energy annually by

these industries, the Commission's engineers estimated that, in five years, the power requirements of these industries would reach 17,781,000,000 kilowatt-hours.

Possibilities of developing such industries in various States and localities are indicated in this report, which should be of material aid to State agencies in planning development where the mineral and chemical deposits which can be utilized exist in proximity to abundant supplies of electric power. While the supply of this edition has been exhausted, the copies can be found in most public libraries and in the libraries of State Commissions.

Regional offices, with engineering, rate and accounting staffs, are maintained by the Commission in five cities, New York, Chicago, Atlanta, Denver, and San Francisco. While these offices are maintained by the Commission for its own work in the various regions, they cooperate with State commissions and other State agencies, as well as with the Federal agencies concerned with power and natural gas resources and developments.

Local Planning Data and Information Available

Maps Published by the Commission Available to State Agencies.

Numerous maps and charts are included in Power Series No. 1, the Interim Report of the Commission's National Power Survey. These include the following:

1. Power zones of the United States.
2. Location of electric generating stations in the United States with annual outputs of more than 100 million kilowatt-hours.
3. Principal generating plants and electric transmission lines of the United States, 1934.
4. Installed capacity of electric generating stations of public utilities in the United States by years 1899-1934.
5. Indexes of electrical energy generation, industrial production, and factory pay rolls, 1929-34.
6. Residential customers, annual energy consumption and average consumption per customer, 1929-34.
7. Year of installation of capacity in service in 1934 and maximum turbine efficiency in each year.
8. Cumulative total of installed capacity at present available for service in central stations of the United States, showing annual increases, 1934.
9. Trend in fuel consumption in steam electric generating stations in the United States.
10. Shortage and surplus of electric generating capacity in the United States based upon existing facilities (1934) with normal reserves.
11. Location of undeveloped water-power areas and their relation to metropolitan load centers of the United States, 1934.
12. Annual production of electricity for public use in the United States, 1887-1934.
13. Coal fields of the United States.
14. Oil and natural gas fields with principal oil pipe lines of the United States.
15. Production of coal, oil, and natural gas by State in 1929.
16. Percent of farms electrified by central stations, and total number of farms in each State.

Production of electricity in the United States, both for public consumption, and by electric railroads, and other plants for their own use, is reported monthly by the Commission. These reports, which are available to any State planning board or other agency upon application, give by States and regions figures on generating capacity, production by both water-power and fuel-burning plants, coal consumed in producing electric energy, and stocks of coal on hand.

These monthly reports, and other data on production, generating capacity, and other details, are summarized in an annual report issued by the Commission entitled "Electric Power Statistics." This publication not only reports production by States and regions, but also shows capacity of and electric production by all classes of plants, publicly and privately owned. It is available, on application, to State and local planning agencies for official use.

Federal Power Commission Reports and Studies of Interest to State Planning Agencies.

Power Series No. 1.—Interim Report of National Power Survey.—(1935). On electric power development, power requirements, generating capacity, undeveloped water power, fuel resources, relation of water and fuel power, interstate transfers of power, and relation of the National Power Survey to future planning by Government and industry. Illustrated by numerous tables, maps, and charts. (Out of print, edition exhausted.) Separate map of principal generating plants and transmission lines available.

Power Series No. 2.—Principal Electric Utility Systems in the United States, with map of service areas and chart of corporate relationships.—(1936). (Out of print, edition exhausted; but separate map and chart are available to State planning agencies on application.)

Power Series No. 3.—The Cost of Distribution of Electricity.—(1939). 35 cents.

Power Series No. 4.—The Use of Electric Power in Transportation. 25 cents.

Power Requirements in Electrochemical, Electrometallurgical, and Allied Industries.—(1938). Illustrated, with numerous charts and tables. \$1. (Out of print, but copies will be found in State Commissions' files, and most public libraries.)

Production of Electricity for Public Use in the United States.—Monthly reports of production and capacity of both water-power and fuel-burning generating plants throughout the United States by States and regions. Mailed without charge monthly, on application.

Electric Power Statistics.—(1939). Statistics of production of electric energy and generating capacity by type of prime mover and class of ownership by States and sections, reported on annual and monthly bases. General data on national production and capacity from 1920 to 1939, inclusive. (Two volumes, 25 cents each.) Sent without charge to planning agencies on application.

Natural Gas Act—Indexed.—Approved June 21, 1938 (1939). 10 cents.

Federal Power Act and Related Legislation, Annotated and Indexed.—(1940). 20 cents.

Provisional Rules of Practice and Regulations Under the Natural Gas Act, With Approved Forms, Effective July 11, 1938.—10 cents.

Federal Power Commission Rules of Practice and Regulations, with Approved Forms, Effective June 1, 1938. 15 cents.

Rates, Taxes, and Consumer Savings—Publicly and Privately Owned Electric Utilities.—(1935-37). 15 cents.

1940 Rate Series.—Typical Bills for Electric Service in Effect January 1, 1940.—43 Separate Reports, one for each State—(1940). 10 cents each.

Typical Net Monthly Bills for Electric Service.—Cities of 50,000 Population or More.—January 1, 1940. 10 cents.

Electric Rate Uniformity.—(1936). 10 cents.

State Commission Jurisdiction and Regulation of Electric Service.—(1936). 10 cents.

Large Electric Utility Maps Published by the Commission.

No. 1. Service Areas of the Principal Electric Utility Systems in the United States.—(1935). Not mounted, in two sections,

each 41½ inches by 51½ inches, \$7.50. Mounted on linen, 51½ inches by 81 inches, with reinforcing rails, \$10.

No. 2. Principal Generating Plants and Electric Transmission Lines of the United States.—(1935). Not mounted, in two sections each 44 inches by 57½ inches, \$5. Mounted on linen, 57½ inches by 85 inches, with reinforcing rails, \$7.50.

Unmounted copies of these maps are available without charge to State planning agencies on application to the Commission.

FOREIGN-TRADE ZONES BOARD

Cellar Act of 1934 (Public, 397, 73d Cong.) (48 Stat. 998-1003)

General Introductory Statement

The Foreign-Trade Zones Board is an administrative and supervisory body. It administers the provisions of the Cellar Act which concern the establishment, operation, and maintenance of foreign-trade zones in ports of entry of the United States by public and private corporations, the expedition and encouragement of foreign commerce, and other related activities.

The Board consists of the Secretary of Commerce, who is chairman and executive officer of the Board, the Secretary of the Treasury and the Secretary of War.

A foreign-trade zone is an isolated, enclosed, and policed area, under the supervision of the Board, operated as a public utility by a corporation in or adjacent to a port of entry, without residential population, furnished with the necessary facilities for loading and unloading, for storing goods, and for reshipping them by land and water; an area into which goods may be brought, stored, and subjected to certain specified manipulation operations. If reshipped to foreign points the goods may leave the restricted zone area without payment of duties and without the intervention of customs officials, except under certain conditions. Such products cannot leave the trade zone for domestic use or consumption without full compliance with existing customs laws. Goods may not be manufactured or exhibited in the area. The zone area is subjected to all laws relating to public health, vessel inspection, postal service, immigration and to the supervision of Federal agencies having jurisdiction in ports of entry, including customs to a limited extent.

Brief General Statement of Functions

Under the enabling act the Board is authorized to receive applications for the establishment of foreign-trade zones by public and private corporations. After

due consideration, as provided for in the act and regulations issued in connection therewith, applications are approved or rejected.

Application for and the establishment of a foreign-trade zone is entirely the work of the local corporation. The Board takes no initiative in any application except in its own behalf. Applications for grants have to be prepared in great detail that they may show for the proposed zone, economic justification, adequate protection of the revenue, complete and approved construction and facilities for cargo and carriers. In order that this information may be complete, the Board has prescribed the form and content of applications for grants.

After receipt of an application and finding it complete and in proper order, the Board appoints an examining committee to make a thorough investigation of an application and report its findings to the Board. In conducting its investigation, this committee is authorized to hold public hearings, to take evidence, and pursue such other procedure as it may deem advisable. The findings of the examining committee are then considered by the Board, along with the application, in rendering a decision approving or disapproving the application.

When an application for the establishment of a zone has been approved, and a grant issued for its construction and operation, the functions of the Board become supervisory, it being authorized to review, determine, supervise, and report on the activities of the zone. The grantee must operate a zone as a public utility in strict conformance to the act and the rules and regulations of the Board, under penalty of fines or withdrawal of the grant.

The Board, on its own initiative, or when presentations are made by grantees or users of foreign-trade zones, determines procedure under the law and regulations. The definition of certain operations, manipulations, and processes may be established by the Board. The prohibition of entry to a zone of certain commodities may also be authorized by the Board.

Activities Affecting and Assistance to Local Planning

The Foreign-Trade Zones Board, being an administrative and supervisory body, does not enter actively into local planning except insofar as the law itself is a guide to local planning.

Among port authorities a knowledge of the free port principle is fairly general. In a number of ports, the foreign-trade zone has a place in expansion plans for future consideration. The Board indirectly encourages such local plans by means of talks before port and foreign-trade conventions, and daily interviews with individuals. In order to be as completely informed as possible concerning an application, the Board may and has undertaken its own investigation and research.

The Foreign-trade zones law and the regulations issued by the Board present a guide to port communities for the facilities necessary in the construction of a complete and modern terminal. In local planning, communities may judge the efficiency of their terminals by the required facilities in a foreign-trade zone.

Only one zone is operating at the present time, this zone being at Stapleton, Staten Island, New York City.

Local Planning Data and Information Available

Foreign Trade Zones. Misc. Series No. 3, War Department and the U. S. Shipping Board, 322 pp. 1929 (contains bibliography), Superintendent of Documents.

Establishment of Foreign-Trade Zones in the United States. Foreign-Trade Zones Board. 12 pp. 1934. Available from Superintendent of Documents, G. P. O.

Regulations Governing the Establishment, Operation, Maintenance, and Administration of Foreign-Trade Zones. Foreign-Trade Zones Board. 83 pp. Reprinted 1938. Available from Superintendent of Documents, G. P. O.

Miscellaneous publications of the Foreign-Trade Zones Board consisting of News Bulletins, article reprints, speeches, etc., available from time to time to a mailing list. Available from the Foreign-Trade Zones Board.

Annual Report of the Foreign-Trade Zones Board, for the fiscal year ended June 30, 1939. Available from Foreign-Trade Zones Board.

INTERSTATE COMMERCE COMMISSION

Interstate Commerce Act (Title 49, c. 1, U. S. C.)

General Introductory Statement

The Interstate Commerce Commission is a regulatory commission, sometimes referred to as an administrative tribunal, independent of control by the executive departments of the Federal Government. It exercises functions quasi-legislative and quasi-judicial in nature.

General Statement of Functions

The regulatory process of the Commission operates on carriers engaged in the transportation of persons or property from one State to another. Although it is not concerned directly with local planning, the Commission's regulatory action in certain fields may indirectly affect the projects of local planning officials. These functions must be exercised from a national rather than a local point of view. Local transportation wholly within a State is subject to regulation by State and municipal authorities under the general police power, without interference by the Federal Government unless the action of those authorities tends to throw a burden on interstate commerce.

The Interstate Commerce Act consists of two parts. Part I applies to transportation by railroads or "partly by railroad and partly by water when both are used under a common control, management, or arrangement for a continuous carriage or shipment," or "the transportation of oil or other commodity, except water and

except natural or artificial gas, by pipe line, or partly by pipe line and partly by railroad or by water." For the purpose of the present discussion pipe-line transportation may be disregarded. Part II is known as "The Motor Carrier Act, 1935," and applies to carriers by motor vehicle.

Part II differs from part I in one rather important respect. The latter section gives the Commission no powers over the service rendered by railroads except with respect to what is known as "car service," which has to do with cars and other rolling stock. In the regulation of common carriers by motor vehicle, "the Commission may establish reasonable requirements with respect to continuous and adequate service."

Activities Affecting and Assistance to Local Planning

By far the greater part of the Commission's work under part I of the act consists of the disposition of proceedings involving the rates, regulations, and practices of common carriers, which determine the revenues received by them for their service in transporting freight. Changes in such rates, regulations, and practices may be required by the Commission only after full hearing upon complaint or an investigation on the Commission's own motion. Complaints may be filed by a shipper or other interested person, a commercial or

industrial organization, or a body politic or municipal organization. In considering the adaptability of land to industrial use, planning officials would be concerned with the availability of rail or water transportation and the level of the freight rates which would be applicable to the inbound raw materials and the outbound finished or semi-finished products. If the particular tract of land in question is adjacent to a large city or some other industrial center, it should be determined whether the tract is within what are termed the switching limits, or whether it would be subject to common basis of rates with other localities in the same general area.

The Commission has the power to regulate freight and passenger fares, but cases involving the latter are much less numerous than those concerning freight rates, and have had to do principally with commutation fares. Planning which relates to suburban residential development may require consideration of mass passenger transportation by railroad. Where this kind of transportation is interstate, the fares are within the jurisdiction of the Commission. Interstate commutation service on a large scale is largely confined to the suburban section surrounding New York City, and the Commission has had several important proceedings involving that section. There have also been a few which have concerned suburbs of the District of Columbia. Changes in passenger fares and freight rates can be required only after a full hearing.

Local planning is affected by the Commission's powers with respect to the physical plant of railroad companies, particularly tracks, terminals, etc. The most important of these powers relates to the construction of new lines, and the abandonment of existing lines. No railroad engaged in interstate commerce may extend its facilities by acquisition or construction of a new line of railroad, nor abandon all or any portion of a line of railroad or the operation thereof, unless there shall first have been obtained from the Commission a certificate that the present or future public convenience and necessity requires the extension or permits of the abandonment. The application for and issuance of such certificates are subject to such rules and regulations as to hearings and other matters as the Commission may prescribe, and the decision of the Commission is based on a consideration of the facts of the particular case as they bear on public convenience and necessity. Certificates may be issued which wholly or partly grant the application, and the Commission may attach such terms and conditions as in its judgment the public convenience and necessity may require. The Commission's authority under this provision does not extend to "the construction or abandonment of spur, industrial, team, switching, or side tracks located or to be located wholly within one State; or of street, suburban, or interurban

electric railways, which are not operated as a part or parts of a general steam railroad system of transportation."

It happens not infrequently that a railroad company wishes to relocate a line for the purpose of improving operating conditions, eliminating grade crossings, removing running tracks from a highway, or permitting its right-of-way to be converted into a highway. Changes of this kind may be involved in local planning. Where changes of this character may substantially affect patrons of the railroad served by the existing line, the abandonment must be authorized by the Commission. Ordinarily in such cases application is made by the interested railroad, and if there are protests, the proceeding is assigned for public hearing.

Where the Commission's approval of new construction is sought, it must be shown that the financial outlay involved is justified, and that the proposed line would not duplicate existing facilities. A railroad company is not required to secure authorization to construct a new station, unless the project involves also the relocation of tracks. Ferries operated by railroad companies in connection with their rail transportation service come within the meaning of the term "railroad".

Another important provision of the Interstate Commerce Act relating to railroad facilities is that which outlines the carrier's duty to construct and operate switch connections. Any common carrier upon the application of a lateral or branch line of railroad or of any shipper tendering interstate traffic for transportation must construct, maintain, and operate switch connections with such branch lines of railroads or private sidetracks, where such connections are reasonably practicable, can be put in with safety, and will furnish sufficient business to justify them. The carrier must also furnish cars for the movement of such traffic without discrimination in favor of or against the interested shipper. Before invoking this provision of the law a shipper or branch railroad carrier must first construct the lateral line or private side track with which the switch connection is sought. If the carrier fails to install and operate a switch connection therewith, upon written application therefor the shipper or branch line of railroad may file a complaint with the Commission, which, after a hearing, may enter an order directing compliance with this provision. The Commission may require common use of railroad terminals by more than one carrier if it finds that such joint use is in the public interest, and is practicable without substantially impairing the ability of the carrier owning the terminal facilities to handle its own business, and may fix the compensation for such joint use if the interested carriers are unable to agree on the compensation. The Commission is also empowered to require the establishment of physical connections between rail lines and

docks serving water carriers, and prescribe the terms upon which these connecting tracks shall be operated.

Part II of the Interstate Commerce Act, relating to motor carriers, requires common carriers and contract carriers by motor vehicle to be licensed by the Commission, which may prescribe maximum or minimum rates for common carriers and minimum charges for contract carriers upon a showing that the rates or charges which such carriers themselves establish are unreasonable or otherwise unlawful. Local operations of motor vehicles are largely exempt from regulation by the Commission, unless the latter finds that regulatory measures affecting such local operation are necessary to

carry out the policy expressed by Congress in the enactment of the act.

Local Planning Data and Information Available

The Commission has no publications, bibliographies, or other similar data directly relating to local planning. In connection with its valuation of railroad property its Bureau of Valuation has obtained a considerable number of maps, profiles, reports of engineers, and related data having to do with the physical property of railroads. These are available for public inspection and examination.

✓ THE TENNESSEE VALLEY AUTHORITY

T. V. A. Act of 1933 and Amendments

General Introductory Statement

The Tennessee Valley Authority is a Government corporation. It is a regional agency, concerned with the drainage area of the Tennessee River, but with implications extending into surrounding territory materially affected by developments within the watershed. The T. V. A. area itself comprises more than 41,000 square miles of land in portions of seven states.

The Authority is a development as well as a research and planning agency. It is charged with the planning and execution of an extensive program of river control on the Tennessee River and its tributaries, involving construction of dams and reservoirs and their operation in connection with existing reservoirs in a manner to produce the maximum of navigation, flood control, and incidental power. It is also charged with the production and distribution of hydroelectric power, and with experimental manufacture and testing of fertilizers. Each of these developmental and experimental programs involves planning and research responsibilities.

In addition, broad powers of research and planning to promote the better use, conservation and development of the natural resources of the region are authorized in sections 22 and 23 of the T. V. A. act. These powers are vested in the President, but by Executive order the board of directors of the Authority has been authorized and directed to make the surveys and plans contemplated under these sections of the act.

Brief General Statement of Functions

✓The four primary functions of the Authority are expressed in its programs of (1) water control in the river channel, (2) water power utilization, (3) water control on the land, and (4) regional planning.

1. *Water Control in the River Channel.*—The T. V. A.

plan for the control of the Tennessee River system involves the construction of dams on several of the major tributaries to govern the flow into the main stream and a series of nine high navigation dams and one low lift lock along the Tennessee River itself. Of these, three were in existence prior to the inception of the T. V. A. Since 1933, the Authority has completed four dams on the Tennessee and has three more under construction. On the tributaries, the Authority has completed two storage projects.

The Authority makes engineering studies, investigations, surveys, maps, reports, and recommendations involving basic hydraulic, geologic, topographic, and cadastral data needed to determine the necessity and feasibility of projects required in the Authority's integrated program of river control. The T. V. A. coordinates and integrates its engineering planning activities with those of other Federal, State, and local agencies engaged in similar work, as for example, the local flood protection works planned by the City of Chattanooga, whenever feasible and consistent with economy of effort and the purposes of the T. V. A. act.

2. *Water Power Utilization.*—By reason of the multiple-purpose character of the T. V. A.'s projects, production of power has been made economically possible by the Authority at dam sites which could not be feasibly developed by private agencies. These generating plants represent needed additions to the region's power supply.

The hydroelectric energy generated by T. V. A. is used in the agency's activities at Muscle Shoals, Ala., in the construction of its other projects, and by the Department of War in the operation of Navigation Locks. The surplus over and above these requirements is sold wholesale to municipalities, cooperative organizations, and several large industries, and retail temporarily to a few direct-service areas.

3. *Water Control on the Land.*—The program of water control on the land involves four major activities by the Authority. The first is a research program aiming at the utilization of Nitrate Plant No. 2 in the development of new and cheaper processes for the production of plant foods of higher concentration. The second is an experimental program involving cooperative agricultural relationships with national, state, district, or county experimental stations or demonstration farms, with farmers, landowners, and associations of farmers and landowners, for the use of new forms of fertilizer or fertilizer practices during the experimental period of their introduction, and for promoting the general improvement of farm management and land-use practices. The third is an erosion control and reforestation program being promoted on a widespread basis through local cooperative arrangements by the T. V. A. forestry relations staff. The fourth is a program of technical study and research aiming at the development of equipment or processes which further the control of water on the land through better land-use practices and the more widespread use of electricity toward that end. This research is carried on largely through cooperation with local agencies.

4. *Regional Planning.*—Under this heading are grouped a number of T. V. A. activities concerned with research studies, experiments, and demonstrations related to the use, conservation, and development of regional resources. These include studies of general social and economic conditions throughout the area, studies of basic natural resources, research and experiments in resource utilization, and the use of T. V. A. reservoir lands for experimental and demonstrational purposes. All of these activities have as their objective the preparation of recommendations to the Congress and the States regarding desirable legislative or administrative action to promote more effective use of the area's natural resources.

5. *Cooperation with Other Agencies.*—All of the foregoing programs involve active cooperation with other agencies at Federal, State, and local levels. These relationships have involved many types and extents of cooperation; they have taken place between the T. V. A. and many Federal agencies; certain Departments of the States of Alabama, Georgia, Kentucky, Mississippi, North Carolina, Tennessee, and Virginia; and a number of counties.

Activities Affecting and Assistance to Local Planning

1. Activities Growing Out of the Developmental Programs

(a) *Readjustment of Communities.*—Where the flooding of reservoirs necessitates readjustment in the physical structure or economic life of adjustment communities, the Authority seeks a cooperative arrangement with the State Planning Commission and the

planning board of the affected community, under which the necessary readjustment may be studied as part of a general plan of community development.

A current example is found at the city of Guntersville, Ala., a small but active rural trading center. Although the physical structure of the community itself was little affected by the creation of Guntersville reservoir, practically all of the nearby farm lands along the river bottom were flooded, leaving the community occupying a slender peninsula jutting out into a large and beautiful lake. To offset the loss of agricultural resources, and to permit full realization of the new recreational and commercial potentialities, some readjustments in the economic life and attitudes of the community has been necessary. To assist in planning and carrying out of these readjustments, a citizens' committee was appointed which later became an official city planning commission. A contract was entered into between the Tennessee Valley Authority and the Alabama State Planning Commission to provide technical assistance to the local group. The city has already taken active advantage of its new opportunities, and has adopted zoning and planning ordinances to assist in guiding its development. The Guntersville method is being extended to other reservoir-affected communities in Alabama, and similar arrangements have been made with the State Planning Commission of Tennessee covering the readjustment of communities in that State.

(b) *Planning assistance to counties.*—Assistance is also rendered to counties affected by the river-development program in working out matters of financial readjustment, relocation of highways, and the readjustment of schools and other county services. In Hamilton County, Tenn., for example, in which the city of Chattanooga is located, an official county planning commission was created by action of the Tennessee State Planning Commission and the County Court, and technical assistance was given in the preparation of county recreation plans, highway plans, suburban and rural zoning regulations, and a survey of forest and industrial resources. A sample study of county zoning, in which a number of T. V. A. departments cooperated, was made for the same county by the Bureau of Agricultural Economics of the United States Department of Agriculture.

(c) *Agricultural Land Use Planning.*—Practical land-use planning inheres in the program for testing new T. V. A. plant foods.

The testing and demonstrating of T. V. A.'s experimental plant foods is being carried on in nearly every section of the United States by State Land Grant Colleges and Universities, the United States Department of Agriculture, and organizations of farmers.

The land-grant institutions of 46 States have given cooperation in this work through their Agricultural Experiment Stations, and studies of T. V. A. experi-

mental phosphates were undertaken by Department of Agriculture Experiment Stations.

Following preliminary evidence reported by experiment stations, equipment was developed and erected at Muscle Shoals for the experimental production of materials for testing under practical farm conditions. The practical testing, conducted by farmers under leadership of Agricultural Extension Services of their land-grant institutions, has been taken up in 22 States. It is being carried on by approximately 30,000 test-demonstration farmers, selected by county organizations of about one-half million farmers. These farms, located largely in the Tennessee Valley, where they were first established, cover more than 4,800,000 acres and, through their influence on neighboring farms, affect the use of a much greater area.

Research at Muscle Shoals.—In carrying out the authorization of Congress "to improve and cheapen the production of fertilizer", the Authority has chiefly directed its experimental work with improved processes and products to developing concentrated phosphatic fertilizers, which, because of their concentration, effect savings to the land by reduction in such costs as handling, bagging, and transportation.

Two hundred seventy-five thousand tons of triple superphosphate have been produced during the several years of experimental operations up to July 1, 1940. Of this quantity, 100,000 tons have been made available to organizations of farmers for their test-demonstrations, 156,000 tons transferred to the Agriculture Adjustment Administration, and 2,170 tons sent experiment stations. The total production of calcium metaphosphate amounts to 12,000 tons.

Farm Test-Demonstrations.—Practical test-demonstrations serve as the transition between the long-time investigations of experiment stations and widespread practical use of the phosphates in aiding the development of a substantial and lasting agriculture. They are planned, organized, conducted, and financed by farmers themselves. The Extension Services, through their county farm and home demonstration agents, aid the local organizations, provide a part of the leadership, and supply necessary technical information. Test-demonstration farmers study and interpret for themselves results they obtain and make the information available to neighboring farmers, to their Extension Services, and to T. V. A.

A test-demonstration farm becomes a public test ground on which the demonstrator tries out a farming program adjusted to soil and water conservation and agriculture development. The demonstrator keeps farm and home records and obtains information as to the value, effect, and best methods of use of the experimental materials in the farming system evolved. In some localities in the Tennessee Valley, the materials

are supplied generally to soil-holding and fertility-building crops by groups of farmers on small watersheds. This testing is to make possible determinations of the broad economic returns resulting to the community from use of the materials and of the program's benefit to water-shed protection.

(d) *Forest Resources Planning.*—The Authority cooperates with local agencies and individuals throughout the Valley region both actively and as a consultant in matters pertaining to forest resources. Through a Valley-wide organization, utilizing the services of eighteen T. V. A.—C. C. C. camps, the Authority assists the individual landowner in coping with soil erosion and advises him on the proper care and management of his wooded lands. In addition, the Authority conducts cooperative surveys, studies, and demonstrations with other agencies in the interest of developing the forest wealth of the Valley. These include the regional inventory of forest resources and industries; technical studies in the fields of forest economics, silviculture, and forest influences; and investigations of sustained yield forest management through cooperative organization of woodland owners. An example of the kind of request received by T. V. A. is that from the State forester of Tennessee to assist the Tennessee State Forest Service in preparing management plans for several areas which were recently turned over to the State as State Forests by the Farm Security Administration.

(e) *Wildlife Resources Development.*—The Authority is interested also in the restoration and development of the wildlife resources of fish, fur, and game. It conducts technical studies of these resources and their environment, particularly as the latter is affected by T. V. A. reservoir development, and cooperates with the appropriate national and local agencies in the establishment and operation of fish hatcheries and game refuges, and in general development of wildlife resources.

(f) *Education.*—The T. V. A. has developed and maintained a system of progressive adult and children's academic and vocational schools, which by their advanced nature exert a stimulating influence in adjacent areas. Mutual agreements with nearby counties and several towns are maintained to emphasize the demonstration value of these school systems.

(g) *Health Programs.*—Malaria is prevalent in varying degrees in the Tennessee Valley from immediately below Chattanooga to Paducah, the highest incidence occurring along the river. The malaria-bearing mosquito is the principal transmitting agent. The Authority has instituted a comprehensive mosquito control program that extends even to cooperative screening of houses by some communities. It is believed that a definite lowering of malaria incidence will result from the measures taken.

The T. V. A. cooperates with the health departments of Alabama, North Carolina, and Tennessee with the double purpose of supporting malaria-control operations around T. V. A. reservoirs and strengthening local health agencies in areas having numbers of T. V. A. employees.

The Authority is an active participant in the tuberculosis study being made jointly with the United States Public Health Service, the Geological Survey, and the Tennessee and Alabama State Health Departments. The object of the study is the discovery of the factors underlying the wide disparity in the prevalence of tuberculosis in the Tennessee Valley as compared to contiguous regions.

(A) The Authority cooperates with appropriate local agencies by rendering assistance in the promotion of more extensive utilization of electricity by states, counties, municipalities, and other public or cooperative organizations of citizens or farmers organized primarily for the purpose of supplying electricity to its own citizens or members.

The Authority works in rural electrification education and demonstration in order to make available to rural areas information concerning farm electrical equipment suited to local conditions, and capable of increasing farm income and improving living conditions. Rural electrification specialists, partially supported by the Authority, work on the agricultural extension service staffs of Alabama, Georgia, Mississippi, and Tennessee. They conduct training schools for county agents, home demonstration agents, and other farm leaders, who in turn arrange demonstration of farm and home electrification. The Authority also has a small staff of agricultural engineers, and a home electrification specialist, who assist the State extension specialists in this work.

The Authority is attempting to encourage the development of recreational facilities on the six lakes recently formed behind the great dams on the Tennessee River and its tributaries, by the establishment of demonstration parks, the contribution of technical advice, and by making lands available to State and local agencies. Two parks have been established in the Norris reservoir area, in cooperation with the National Park Service and the Civilian Conservation Corps, and one was completed in 1939 near Pickwick Dam. The State of Tennessee is now developing two similar areas in the Chickamauga reservoir area. Carefully selected cabin sites on the shores of the reservoirs are being rented to the public, and docks and fishing camps leased to concessionaires. Fishing, camping, and the operation of private pleasure craft are attracting steadily increasing numbers of vacationists from all parts of the nation.

2. Activities Growing Out of the Program of Regional Studies

While the planning implications of the T. V. A. developmental programs are very broad, and lead to numerous planning contacts with local agencies affected by the river control, fertilizer, and electricity programs, there are other instances of planning assistance which stem from the Authority's general responsibilities in the field of regional research and planning. An instance of this is found in the cooperative project between T. V. A. and the Tennessee State Planning Board intended to stimulate interest and assist in the planning of counties and communities adjacent to the Great Smoky Mountains National Park. T. V. A. participation in this project grew out of the Authority's regional studies of the recreational resources and opportunities in the Tennessee Valley. The necessity of protecting these resources by reasonable direction and control of resort development prompted selection of the Great Smoky Mountains area as an experimental planning project. With the formation of an official regional planning commission for this territory, T. V. A. has withdrawn from active participation in the work.

Numerous requests for assistance in meeting local problems are received from counties and communities throughout the Tennessee Valley area. To date no general framework for dealing with these situations has been developed, and a number of experimental approaches have been made along different lines. However, where an active state planning board exists, and an active local planning agency exists or can be created, it is becoming the practice to try to work out some co-operative arrangement under which the research facilities and technical assistance of the T. V. A. may be made available to the locality through regularly constituted state and local agencies.

Local Planning Data and Information Available

1. *Maps and Surveys*.—Planimetric maps based on aerial surveys cover the entire watershed area, and are available to local planning agencies. Topographic maps for the same area are in preparation, and will be available as soon as completed. Special topographic and property surveys along the river can be used to supplement the more general maps. Soil maps are available for counties totalling about one-third of the region's 41,000 square miles.

2. *Research Data*.—These include surveys and tax losses due to reservoir land purchase for all affected counties and municipalities, data on the kinds and amounts of land purchased, extensive social and economic data on families displaced by reservoirs, and considerable additional material of like general nature. There are also numerous studies of social and economic conditions throughout the entire drainage area, in many cases broken down on a county, community, or trade area basis. Much of this material is not in published form. Information available with respect to special counties and communities can be ascertained by writing to the T. V. A. information office.

Federal Aids to Local Planning

3. *Reports and Publications.*—The Authority has certain pamphlets and reports which are available at the prices indicated below:

Norris Dam Illustrated, \$0.15.
Scenic Resources of the Tennessee Valley, \$1.
TVA Program—In Text and Pictures, \$0.10.
Unified Development of the Tennessee Valley, \$0.25.
Drawings for the Pickwick Landing Project, \$2.50.
Drawings for the Wheeler Project, \$2.50.
Hydraulic Data Activities of the Tennessee Valley Authority, \$0.50.
Plans and Specifications for the Norris Dam, \$2.50.
Technical Review of the Norris Project, \$1.
Technical Review of the Pickwick Landing Project, \$1.
Technical Review of the Gunterville Project, \$1.

Technical Review of the Wheeler Project, \$1.
Value of Flood Height Reduction from TVA Reservoirs to the Alluvial Valley of the Lower Mississippi River, \$0.50.
Engineering Geology and Mineral Resources of the Tennessee Valley Region, \$0.50.
Geologic Work of the Tennessee Valley Authority, 1933-1935, \$0.50.
Structural Materials of the TVA Region, \$0.50.
Manual for Soil Erosion Control in the Tennessee Valley (Engineering Phase), \$0.85.
Wiring and Lighting the Farmstead, \$0.50.

These publications may be obtained by writing the Treasurer of the Tennessee Valley Authority, Knoxville, Tennessee, enclosing a check or money order payable to the Authority.

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VETERANS' ADMINISTRATION

The Consolidation Act of 1930 (Public, 536—71st Cong.)

Brief General Statement of Agency Functions

The major activities of the Veterans' Administration are directed to the administration of benefits extended to ex-members of the military and naval forces of the United States and their widows and dependents under specific legislation. Benefits for entitled beneficiaries include (1) monetary benefits such as pensions, disability compensation, Government insurance, and compensation and pension for widows and dependents of ex-service persons; and (2) hospital treatment and domiciliary care for discharged eligible veterans and officers and enlisted men retired from the regular establishment, and out-patient treatment for discharged beneficiaries suffering from diseases or injuries incurred in or aggravated by active military or naval service.

The functions necessary to accomplish these objectives include a great volume of activities in almost every ordinary occupational field from the unskilled laborer through the entire range of the professions. The nature of the service is so restricted to a particular group of the population that a minimum of coordination with similar local activities is required.

Activities Affecting and Assistance to Local Planning

The Veterans' Administration is related to local planning insofar as a particular locality may desire to have the benefits of the work accomplished in the Veterans' Administration Facilities, particularly in the professional fields, with respect to the relief which the hospitals and homes provide in lightening the load on local institutions, and the use of information and cooperation which may be gained from the Administration's facilities in the treatment of diseases and injuries.

The Administration has its own hospital and domiciliary facilities, supply depots, and regional offices in the field, in addition to its central office in Washington. There are hospital facilities in operation in 87 locations in 45 States and the District of Columbia. These facilities are constantly being expanded in locations where needed, without regard to State and county lines. This affords relief of overcrowded conditions in State and county hospitals and provides room in these hospitals for non-veteran patients. In conjunction with the Federal Board of Hospitalization, hospital sites and expansion of existing facilities are determined by the distribution of the veteran population and the availability of transportation facilities. In the selection of sites, there the many local considerations to be weighed, such as amusement and recreational facilities and the availability of personnel living quarters. Plans for the buildings are designed by the engineering staff of the Veterans' Administration.

Local Planning Information and Data Available

The Veterans' Administration has endeavored to make available to the medical profession and interested members of the public the results of its experience and research in the care and treatment of its beneficiaries. Inasmuch as no funds are available for publications of its own, the dissemination of this material has been chiefly through written articles. The Administration does publish for the benefit of its own staff a quarterly medical bulletin.

Reports of the Administrator of Veterans' Affairs.

Occupational Therapy Articles by Personnel of the Veterans' Administration.

The Medical Bulletin of the Veterans' Administration, issued quarterly. For sale by the Superintendent of Documents, Washington, D. C.

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NATIONAL RESOURCES PLANNING BOARD

PUBLICATIONS¹

GENERAL

NATIONAL PLANNING BOARD REPORT 1933-34. Published August 1, 1934, and issued November 18, 1934. "A Plan for Planning." Final report of the National Planning Board. 25 cents.

NATIONAL RESOURCES BOARD REPORT. Published December 1, 1934, issued December 18, 1934, and submitted to the President in accordance with Executive Order No. 6777, June 30, 1934. A report on national planning and public works in relation to natural resources and including land use, and water and mineral resources, with findings and recommendations. \$3.25 (cloth-bound).

Prices for the separate paper-covered parts are: **PART I, REPORT OF THE BOARD**, 25 cents; **PART II, LAND REPORT**, 35 cents; **PART III, WATER RESOURCES**, \$1 **PART IV, MINERAL POLICY** (out of print); and **PART V, REPORT OF THE BOARD OF SURVEYS AND MAPS**, 20 cents.

PROGRESS REPORT WITH STATEMENTS OF COORDINATING COMMITTEES. June 15, 1936. 25 cents.

PROGRESS REPORT—1937. October 1937. 10 cents.

PROGRESS REPORT—1938. December 1938. 15 cents.

PROGRESS REPORT—1939. June 1939. 35 cents.

TECHNOLOGICAL TRENDS AND NATIONAL POLICY. June 1937.

The first major attempt to show the kinds of new inventions which may affect living and working conditions in America in the next 10 to 25 years. \$1.

OUR CITIES—THEIR ROLE IN THE NATIONAL ECONOMY. June 1937. Transmitted to President Roosevelt. Part One: Facts About Urban America; The Process of Urbanization; The Problems of Urban America. Part Two: The Special Studies of the Urbanism Committee. Part Three: General Policy and Recommendations. 70 cents.

URBAN GOVERNMENT. Volume I of the Supplementary Report of the Urbanism Committee. February 1939. 50 cents.

POPULATION STATISTICS. October 1937. This report is comprised of three values: 1, *National data*, 30 cents; 2, *State data*, 25 cents; 3, *Urban data*, 15 cents.

THE PROBLEMS OF A CHANGING POPULATION. May 1938. Transmitted to President Roosevelt. The major problems of our human resources are discussed in the report, which presents significant data in regard to population trends, age groups, migration within the country, health, education, and other similar questions. 75 cents.

RESEARCH—A NATIONAL RESOURCE. Part I: Relation of the Federal Government to Research. December 1938. 50 cents.

CONSUMER INCOMES IN THE UNITED STATES. Their distribution in 1935-36. August 1938. Transmitted to President Roosevelt. This report presents the first authoritative, broad, national picture of the division of income among the American people. 30 cents.

CONSUMER EXPENDITURES IN THE UNITED STATES. March 1939. Sketches in broad outline a picture of the Nation's consumption in 1935-36. 50 cents.

THE STRUCTURE OF THE AMERICAN ECONOMY. Part I: Basic Characteristics. June 1939. Major aspects of the national economy emphasizing the processes employed to produce useful commodities and services. \$1.00.

THE STRUCTURE OF THE AMERICAN ECONOMY. Part II: Toward Full Use of Resources. A discussion of the problems of full employment of resources and manpower, going beyond questions of structure and into the field of operating characteristics. June 1940. 15 cents.

CAPITAL REQUIREMENTS. A study in methods of analysis of the capital equipment requirements of one segment of the national economy, the iron and steel industry. November 1940. 20 cents.

ENERGY RESOURCES AND NATIONAL POLICY. Report of the Energy Resources Committee to the National Resources Committee (H. Doc. 160, 76th Cong., 1st sess.). January 1939. A report on energy resources in the United States, which includes recommendations for their prudent utilization and conservation in relation to each other and to the national economic structure. \$1.00. (Published by Congress.)

RESIDENTIAL BUILDING. Housing Monograph Series, No. 1. April 1939. This report is the first in a series of four and deals with some of the broader background factors which influence the demand for housing and the methods of supplying this demand. 10 cents.

LEGAL PROBLEMS IN THE HOUSING FIELD. Housing Monograph Series, No. 2. May 1939. Part I, Private Housing Legal Problems. Part II, Legal Aspects of Public Housing. 25 cents.

LAND, MATERIALS, AND LABOR COSTS. Housing Monograph Series, No. 3. July 1939. Part I, LOCATION FACTORS IN HOUSING PROGRAMS; Part II, SITE PLANNING; Part III, THE SIGNIFICANCE OF SMALL-HOUSE DESIGN; Part IV, BUILDING MATERIALS AND THE COST OF HOUSING; Part V, LABOR AND THE COST OF HOUSING; and Part VI, BUILDING REGULATIONS AND THE HOUSING PROBLEM. 80 cents.

STATE PLANNING

STATE PLANNING—A REVIEW OF ACTIVITIES AND PROGRESS. June 1935. Shows the growth of State planning and the value and importance of State responsibility for planning endeavor. 75 cents.

STATE PLANNING, PROGRAMS, AND ACCOMPLISHMENTS. December 1, 1936. Out of print.

THE FUTURE OF STATE PLANNING. March 1938. Transmitted to President Roosevelt. A report by a special review group on "what State planning boards might become" and a discussion of the most suitable methods for their advancement. 25 cents.

¹ Unless otherwise stated, copies of the publications of the National Resources Planning Board and its predecessors may be obtained from the Superintendent of Documents, Government Printing Office, Washington, D. C., at the prices quoted.

Publications

STATE CONSERVATION OF RESOURCES. January 1939. Trends in the growth of State conservation of land, water, mineral, and human resources in terms of governmental functions, structures, and techniques of control. 15 cents.

REGIONAL PLANNING

REGIONAL FACTORS IN NATIONAL PLANNING AND DEVELOPMENT. December 1935. Deals with important problems of planning and development which overlap State lines or which involve Federal and State or local interests and jurisdictions. 50 cents.

REGIONAL PLANNING, PART I—PACIFIC NORTHWEST. May 1936. This, the first of a series of reports on regional planning, deals with immediate and urgent problems in the Columbia Basin and particularly with the policies and organization which should be provided for planning, construction, and operation of certain public works in that area, Bonneville and Grand Coulee Dams in particular. 50 cents.

REGIONAL PLANNING, PART II—ST. LOUIS REGION. June 1936. Out of print.

REGIONAL PLANNING, PART III—NEW ENGLAND. July 1936. Out of print.

REGIONAL PLANNING, PART IV—BALTIMORE-WASHINGTON-ANNAPOLIS AREA. November 1937. Published by the Maryland State Planning Commission, Baltimore, Maryland. 40 cents.

REGIONAL PLANNING, PART V—RED RIVER OF THE NORTH. August 1937. Transmitted to President Roosevelt. 25 cents.

REGIONAL PLANNING, PART VI—UPPER RIO GRANDE. February 1938. A report on the Rio Grande Joint Investigation in the Upper Rio Grande Basin in Colorado, New Mexico, and Texas, 1935-37. This report furnishes a sound factual basis for an apportionment of the waters of the Rio Grande above Fort Quitman that would be fair to each of the States concerned. 2 vols., text and maps. \$3.50.

REGIONAL PLANNING, PART VII—ALASKA, ITS RESOURCES AND DEVELOPMENT. December 1937. Prepared by the Alaska Resources Committee in accordance with a congressional resolution and submitted to President Roosevelt. 50 cents.

REGIONAL PLANNING, PART VIII—NORTHERN LAKES STATES. May 1939. Report of the Northern Lakes States regional committee to the National Resources Committee. A report on conditions in the cut-over area of Minnesota, Michigan, and Wisconsin. 25 cents.

FOREST RESOURCES OF THE PACIFIC NORTHWEST. March 1938. Transmitted to President Roosevelt. 25 cents.

PUBLIC WORKS

PUBLIC WORKS PLANNING. December 1, 1936. Transmitted to Congress by President Roosevelt on February 3, 1937. A report recommending a proposed policy for planning, programming, timing, and division of costs of public works, including a report on "Drainage Basin Problems and Programs." 80 cents.

ECONOMICS OF PLANNING PUBLIC WORKS, by John Maurice Clark, professor of economics, Columbia University. 1935. Presents a part of the research work carried on by a staff serving under the National Planning Board to answer the question: How may public works be so handled as to contribute as much as they can to industrial stability? 25 cents.

PUBLIC WORKS IN PROSPERITY AND DEPRESSION, AND THEIR UTILIZATION AS AN AGENCY OF ECONOMIC STABILIZATION, by Arthur D. Gayer. September 23, 1935. This volume is a revised version of the official report made to the National

Planning Board by Dr. Gayer in June 1934. Obtainable only at the National Bureau of Economic Research, 1819 Broadway, New York City. Price, \$3.00.

THE ECONOMIC EFFECTS OF THE FEDERAL PUBLIC WORKS EXPERIENCE, 1933-1938. September 1940. A report summarizing the experience of the Federal Government gained during the last decade in its efforts to use public construction as a partial offset to unemployment, and idle capital, equipment and materials. 25 cents.

LAND PLANNING

SUPPLEMENTARY REPORTS OF THE LAND PLANNING COMMITTEE, 1937. Incorporating the basic data and information collected in preparing part II of the National Resources Board report of December 1934. There are 11 reports printed separately and available at the office of the Superintendent of Documents.

FARM TENANCY. February 1937. A report of the President's Committee on Farm Tenancy, prepared under the auspices of the National Resources Committee. 30 cents.

FUTURE OF THE GREAT PLAINS. December 1936. A report of the Great Plains Drought Committee, with a study of characteristics of the area, and a proposed program of readjustment and development. 40 cents.

WATER PLANNING

DEVELOPMENT OF THE RIVERS OF THE UNITED STATES. (H. Doc. 395, 73d Cong., 2d sess.) 1933. A message from the President of the United States transmitting a preliminary report on a comprehensive plan for the improvement and development of the rivers of the United States. 80 cents.

REPORT OF THE MISSISSIPPI VALLEY COMMITTEE. Dated October 1, 1934, and issued December 23, 1934. A plan for the use and control of water within the Mississippi Drainage Basin. \$1.50.

DRAINAGE BASIN PROBLEMS AND PROGRAMS. December 1, 1936. Represents the first attempt through joint efforts of Federal, State, and local agencies, official and unofficial, to formulate a national water plan. \$1.50.

DRAINAGE BASIN PROBLEMS AND PROGRAMS—1937. February 1938. A revision and extension of the initial report published in December 1936. 65 cents.

DEFICIENCIES IN BASIC HYDROLOGIC DATA. September 1936. A report of the Water Resources Committee which proposes remedies for current deficiencies in hydrologic data essential for sound water conservation. 30 cents.

DEFICIENCIES IN HYDROLOGIC RESEARCH. March 1940. A guide for the use of research workers engaged in hydrologic or related investigations, and a review of major deficiencies in current research practices. 25 cents.

WATER POLLUTION IN THE UNITED STATES. Third Report of the Special Advisory Committee on Water Pollution (H. Doc. 155, 76th Cong., 1st sess.). April 1939. A message from the President of the United States transmitting a report on water pollution in the United States, which outlines the status of pollution, the cost of bringing about a reasonable degree of abatement, and the financial, technical, and administrative aspects of such a program. 25 cents.

LOW DAMS—A MANUAL OF DESIGN FOR SMALL WATER STORAGE PROJECTS. March 1939. Prepared by the subcommittee on small water storage projects of the Water Resources Committee of the National Resources Committee. A manual containing instructions, standards, and procedures intended to serve as a guide to safe practice in the design of small water-storage projects and appurtenant structures. \$1.25.