



APPRAISAL OF

**CENSUS
PROGRAMS**

REPORT OF THE INTENSIVE
REVIEW COMMITTEE TO THE
SECRETARY OF COMMERCE

February 1954



*“Statistical records are the foundations
of an informed public opinion in a complex society”*

—Hoover Commission
Task Force Report on Statistical Agencies
January 1949

DEPARTMENT OF COMMERCE

OFFICE OF THE SECRETARY

WASHINGTON 25

February 16, 1954.

The Honorable the Secretary of Commerce.

Dear Mr. Secretary: We have the honor to submit herewith our final report embracing our recommendations on the several major programs of the Bureau of the Census and including our statements and findings with respect to these programs and related phases of the work of the Bureau.

Our review of the programs of the Bureau of the Census has by its terms been a rapid and intensive one. The full slate of nine members was completed on October 1, 1953, and the first full meeting was held October 8-10, although an organization meeting, attended by the first six members named, was held September 16-17. The second full meeting was held on November 19-21 and the final meeting on December 10-12. At the session on December 12, we were privileged to present to you orally our recommendations on all major programs. These recommendations and the supporting statements and findings were submitted to you in writing in a preliminary report on December 21. That preliminary report, with minor editorial revisions, is included here as Part II.

We wish to express our heavy indebtedness and deep gratitude to the more than 1,200 organizations and informed individuals who responded to our requests for information and counsel. Many of these were organizations or associations having hundreds, thousands, and even millions of members; and many were from business concerns, large, medium, and small.

The business concerns represented in responses to the marketing uses survey conducted for the Committee have sales of approximately \$100 billion annually; the national business organizations and associations responding have memberships running into many thousands; the trade associations responding have company memberships running into the thousands, and the industries represented by them have annual sales estimated in excess of \$200 billion, although duplicating in part the sales volume stated above; farm organizations responding have membership of about 3,500,000; labor organizations responding have membership of about 14,000,000; professional associations responding have membership of some thousands; and the key and informed individuals responding to the requests from the eleven panels reporting to the Committee numbered 260.

Special mention is due these eleven panels of informed specialists who devoted intensive attention each to one of the

major programs and submitted findings and recommendations thereon. Their contributions, at considerable cost in time and effort, were of great value to the Committee. The chairmen and members of these panels and participants in their surveys are listed beginning on page 99 of this report.

Similar special mention is due the American Marketing Association for its survey of the marketing uses of census results, conducted over a very short period and at considerable monetary cost borne entirely by the Association and its members, and requiring a sizable investment in time and effort on the part of a group of survey-experienced members in analyzing the 682 responses to its questionnaire.

Likewise, special mention is due the Trade Association Department of the Chamber of Commerce of the United States and the National Industrial Council for their survey of trade association uses of census information, conducted at their own expense and summarized by them for the Committee in a report analyzing the 241 trade association responses.

The two surveys referred to and the letters and statements submitted to the Committee are reproduced in a separate volume of Exhibits to this report. Because of its bulk and for reasons of economy, only a limited number of copies has been printed.

We are in heavy debt to the 12 Federal agencies whose officials gave us both oral and written statements of their appraisals of programs of the Bureau of the Census and their recommendations concerning them; and to the heads of three other divisions of the Department of Commerce who appeared before us and supplied written statements. Their names appear on page 109 of this report. The oral statements by these Federal officials were made in executive sessions attended only by members of the Committee and its Executive Secretary. The written statements submitted in confidence were shown only to members of the Committee and the Executive Secretary. These written statements were also shown to the Office of Statistical Standards of the Bureau of the Budget, with the consent of the authors; and that Office is now the repository of all these statements, excepting one which was returned to the agency concerned, at its request.

The Committee has made no recommendations involving interdepartmental problems, since its assignment related only to the programs of the Bureau of the Census. A number of such problems were encountered during the discussions with other statistical agencies of their needs for data and the uses to which they put data collected by the Bureau of the Census. The Committee has attempted to take into account their recommendations for improving the useability of census data, but it has referred to the Office of Statistical Standards in the Bureau of the Budget the jurisdictional questions.

The excellent cooperation and helpful assistance we have received from all these sources is, we believe, an indication of the near-universality of interest in the work of the Bureau of the Census, a measure of the widespread use and influence of census results, and a tribute to the accomplishments of the Bureau. We have been impressed by the confidence in the Bureau staff and in the Bureau's reports expressed in so many of these communications.

Finally, we must express our gratitude for the unfailing cooperation and assistance given us throughout our review by the Director of the Bureau of the Census, the Deputy Director, the Assistant Directors, and the numerous members of the staff who have appeared before us and on whom we have called for information and help.

In submitting this report to you, we wish to assure you of our appreciation of the full-fledged support you have given us at all times in our effort to conduct an independent and thorough review. We earnestly hope the report will be of value to you, to the government as a whole, and to the multitude of users of census materials.

We request that the Committee now be discharged.

Respectfully yours,

INTENSIVE REVIEW COMMITTEE,

Ralph J. Watkins, Chairman

Murray R. Benedict

J. A. Livingston

John W. Boatwright

Myron S. Silbert

Stephen McK. DuBrul

Lazare Teper

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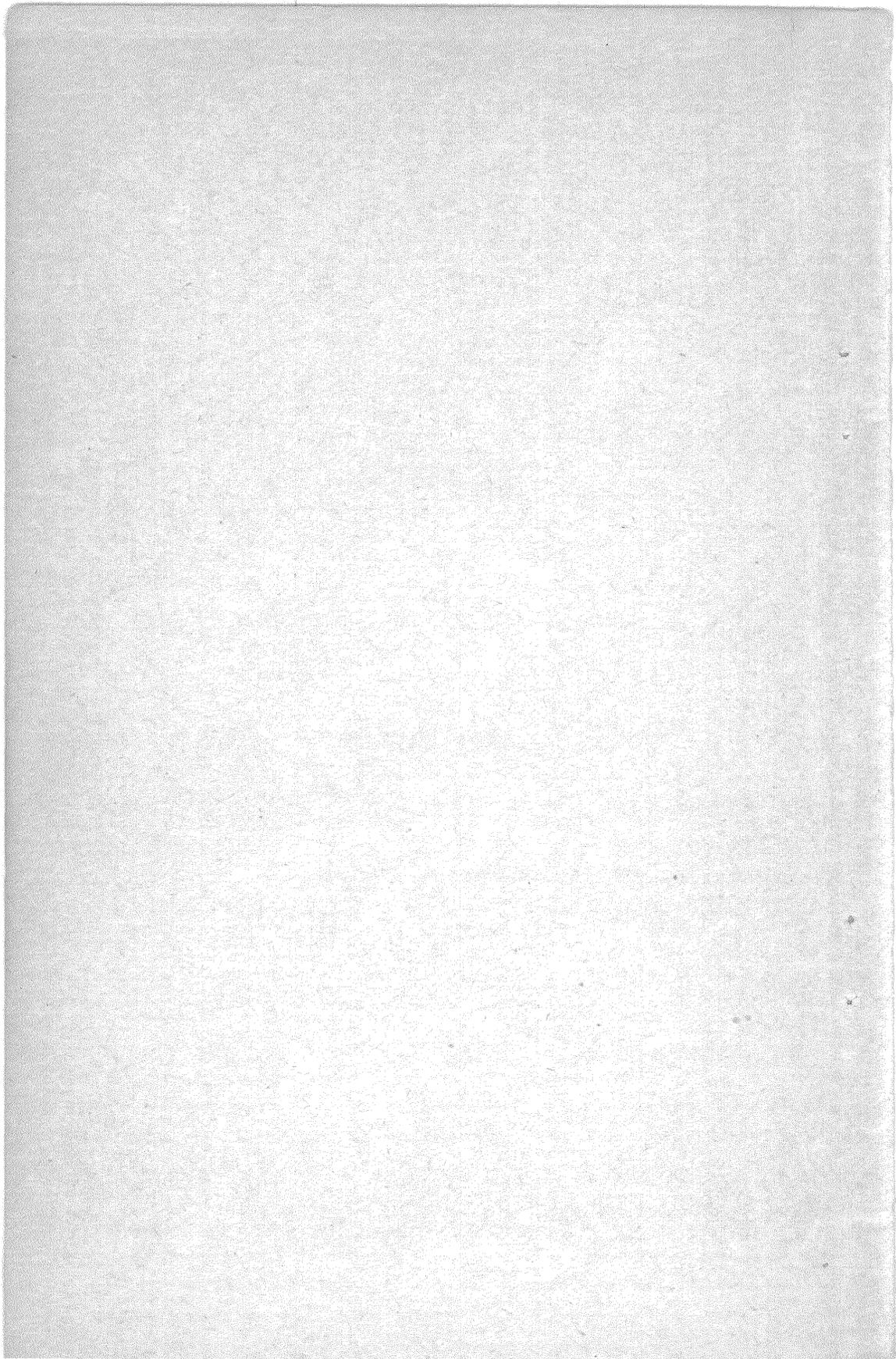


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PREFATORY NOTE ON CENSUS BENCHMARKS

Frequent reference is made throughout this report to *benchmark* data or census *benchmarks*. Those living in rural areas or from rural backgrounds and those who have spent much time in the mountains and fields will be as familiar with the term as are the technicians. For they are accustomed to seeing the surveyor's "B. M." letters cut or painted on boulders or trees, followed by numbers marking the elevation of that spot in feet above sea level. But perhaps to some general readers in urban areas, the term will not be so clear.

The surveyor's benchmark on a relatively permanent or durable object is a reference point from which the elevation of other points in that general area can be measured. From that specific field of usage, the term has spread to many other fields as denoting a point of reference from which measurements of any sort may be made.

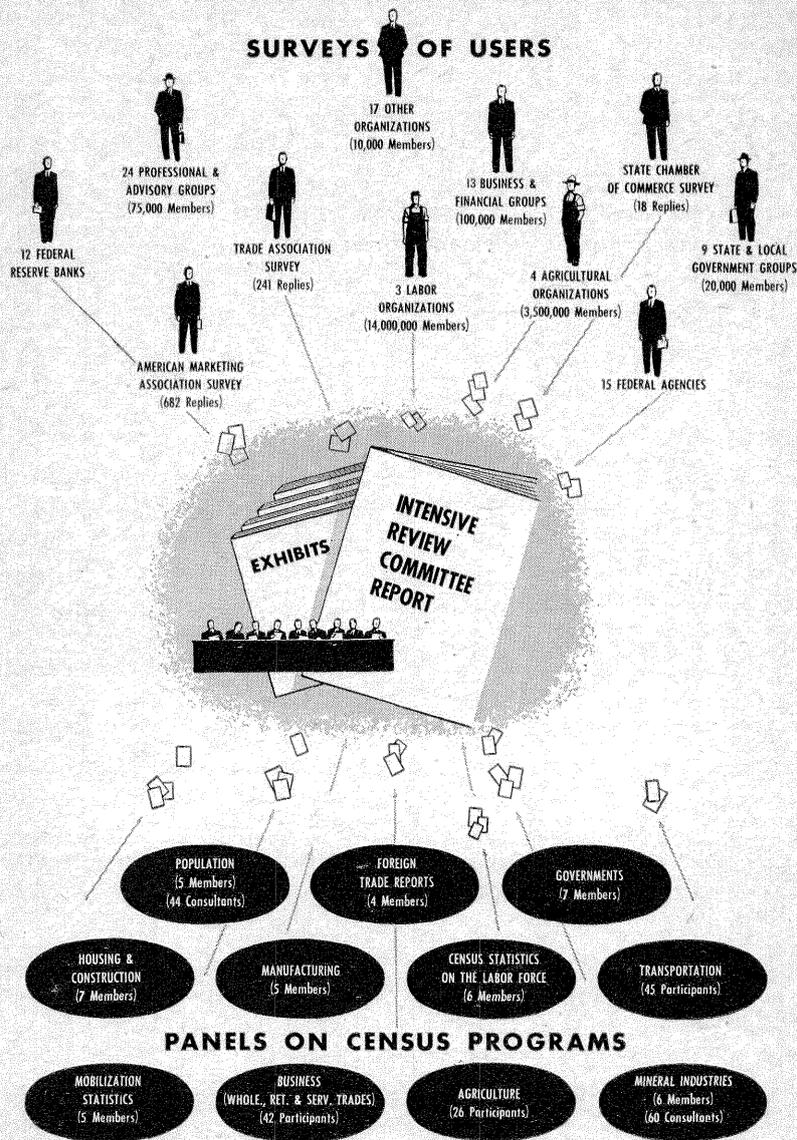
When applied to the census field, *benchmark* refers generally to a substantially complete count or enumeration of a given area for a given period, covering population or manufacturing or any other of the subjects surveyed in census programs. These complete counts serve as benchmarks for sample surveys, projections, forecasts, and various types of special estimates. Starting from these totals as reference points or benchmarks, the analyst may by sampling or estimating methods derive measures for an area or category not explicitly shown in the full count; or he may make projections into the future or prepare estimates for dates falling between past censuses.

An example of use of census data as a benchmark is the preparation of current and future estimates of population. The analyst begins with the population figures from the last complete census; and to reach a current date adds figures on births, subtracts figures on deaths, and similarly adds and subtracts figures on migration to and from the country or the specific area. To project into the future, he applies life-table survival factors to "age" the population and includes also estimates of future births based on trends in the birth rate.

Still another example is the use of census of manufactures data to determine what industries should be included in current indexes or indicators of production, and what weights or values should be assigned to the several industry indexes in combining them in a general index of production. Similarly, these production indexes are revised from time to time on the basis of the periodic censuses of manufactures to bring them in line with the changes revealed by those enumerations or benchmarks.

Nearly all current economic indicators rest on Bureau of the Census benchmarks in one way or another.

HOW REVIEW WAS CONDUCTED



PART I.—SUMMARY OF FINDINGS AND RECOMMENDATIONS

THE SETTING

The key to the successful functioning of any human institution is good management, and all good management is dependent on good records.

Both the level and the direction of change of the American continental economy at any time are the resultant of the myriad of decisions made daily by the many millions of business concerns and farmers and other producing and buying and selling units, including our families and our local, State, and Federal agencies.

Every one of these decisions must be based on information, good or bad. In the main, these decisions can be no better than the information on which they are based.

Freedom of choice is the hallmark of a free society. Such a society is therefore peculiarly dependent on the widespread dissemination of facts. It is dominated by individual motivations and actions, and they must be informed motivations and actions if their results are to serve the general welfare.

In assessing the informational needs of our society today, it is well to remember that it is in unprecedented degree a dynamic and highly mobile society. Our population is on the move and is increasing by about $2\frac{3}{4}$ million a year. Great new industries have grown up over the span of a few years, and old industries have revolutionized their processes, under the pressures of a vast technological revolution. Epochal transformations of our economy have taken place, in the direction of both more equitable functioning and more efficient functioning.

We have achieved a transformation in our thinking under which all major groups in our society now take it for granted that both public policy and private policy must be aimed at providing incentives toward both reasonable economic stability and growth of our economy, with the obligation of taking such remedial action as economic circumstances may require.

Economic stability and economic growth are measurable phenomena. To that end, Federal and private agencies have constructed a comprehensive system of economic indicators for determining currently the condition of our economy relative to production and business

activity, employment and wages, unemployment, population, prices, purchasing power, credit, money, and finance.

The single most comprehensive economic indicator is the edifice of figures making up Gross National Product, or the sum total of the value of all the goods and services produced in our economy. These economic indicators do not represent statistics for statistics' sake. They are guide posts to action, guides for both public policy and private business policy; and they are followed intently by government officials and equally by the many scores of thousands of people in our business enterprise and farm economy who must be continually alert to changes in economic conditions and trends.

This comprehensive system of economic indicators rests in one way or another on the benchmark statistics provided by the Bureau of the Census. Without these census records, it would not be possible to construct or interpret this system of economic indicators. Business executives, farmers, labor leaders, professional men, scholars, scientists, government officials, and administrators in all phases of our society are dependent on census records or on economic indicators based on census records.

The founders of our country held to the view that man could by rational choice shape his destiny—"from reflection or choice" and not merely from "accident or force," as Alexander Hamilton stated in *The Federalist*, No. I, in 1787.

Article I, Section 2, of the Constitution of the United States established the beginnings of the Federal government's statistical program in providing for "the *census* or enumeration" to "be made within three years after the first meeting of the Congress . . . and within every subsequent term of ten years . . ."

Perhaps the climax up to date of census planning "from reflection or choice" was reached in 1948 when the carefully planned, rescheduled and staggered, program of quinquennial economic censuses was provided for by the 80th Congress, supplemented by the 81st Congress in authorizing in 1949 the decennial census of housing and in 1950 the quinquennial census of governments.

It has been the aim of the Intensive Review Committee to try to learn from "reflection or choice," in consultation with principal and informed users of census materials, how well those programs and related census work have been carried out, what uses they have served, and what changes and improvements should be made to bring this phase of government in line with the needs of our present-day society.

The Committee has tried to keep in mind and weigh carefully considerations of economy. To this end cost estimates for each presently authorized Bureau program were shown on the questionnaires used in the surveys conducted for the Committee, and cost estimates are shown in this report for all recommended programs.

Census programs for a continental economy of more than 161,000,000 people are costly at best, but it is clearly necessary that earnest efforts be made to carry out those programs with maximum efficiency and at the lowest cost consistent with the contributions that may reasonably be expected from the Bureau toward the effective functioning of our society. In the context of today, these contributions mean above all the provision of benchmark records and economic indicators, or foundations for economic indicators, which supply guides to public and private policy aimed at supporting reasonable economic stability and economic growth.

POPULATION

The Committee finds that the decennial census of population, our oldest and largest statistical undertaking, has almost universal use throughout our society. Its records are indispensable both for all levels of government and for the private economy.

Savings of perhaps from 10 to 20 percent in the cost of the decennial population census, which for the 1950 census amounted to about \$60,000,000, appear possible for 1960 if only the principal items can be asked of all respondents and the other items asked only on a sampling basis, such as of every fifth person. Further research on methods and further consultation with user groups will be required to determine feasibility.

There is a demand for a simplified population census, covering a few principal items, at the midpoint of each decade; but the Committee does not believe that the increased benefits would justify the cost. The decennial census is now supplemented by the monthly current population survey. Research on low-cost sampling methods for estimating population for small areas or for problem areas impresses the Committee as more important at this stage than provision for a mid-decade census.

The development of the concept of urbanized areas, not limited by political boundaries, and presentation of detailed census data for those areas, represent a significant advance. The Committee believes this program should be extended below the present central-city limit of 50,000 population or more.

Political recommendation has traditionally played a part in the selection of supervisors and enumerators for the decennial census. The effect has been, in some areas at least, to adulterate the influence of the Bureau's careful planning and to produce defective results. Present needs require, and present State Employment Service and other recruiting and training services and methods facilitate, the selection of personnel on the sole basis of qualifications.

The Bureau's position in gathering population statistics includes the responsibility for estimating the size and characteristics of the popu-

lation for intercensal dates and making projections for future dates. These estimates and projections have thousands of public and private applications.

A significant development in the population program since 1940 is the monthly current population survey, conducted by the Bureau with a scientifically selected sample of 25,000 households. It provides up-to-date data on the labor force, employment, and unemployment. Supplemental inquiries in the survey yield information on many other subjects, such as migration, family composition, marital status, education, farm population, and consumer income.

Through the census of population and the current population survey, supplemented by other censuses and surveys, the Bureau provides an important share of our information on the gainful activities of our population. A multitude of important economic analyses rests on these data.

THE COMMITTEE RECOMMENDS:

1. That the Bureau continue its research and consultation on the feasibility of limiting complete enumeration in the 1960 population census to the principal items and employing sampling methods for other items, with a view to realizing, if found feasible, the economies of funds and time that such a simplified census would make possible.
2. That the Bureau maintain its permanent staff of professional and trained administrators, analysts, and technicians, as the core for the planning and supervision of population censuses, surveys, estimates, and projections. Notable gains in professional personnel have been made by the Bureau over the past two decades. It is imperative that these gains be preserved.
3. That the Bureau continue its program of research, experimentation, analysis, and appraisal, with particular reference to (a) the large savings in money and time that can be realized from the modern sampling techniques that its own staff has done so much to establish, (b) the similarly large savings in money and time that can be made through present and emerging electronic equipment, (c) the testing of new methods, forms, and procedures, and (d) the careful auditing and appraisal of its results.
4. That plans be made for as great an extension of the number of urbanized areas for the 1960 census as resources will permit, in recognition of the near-universality of the trend toward peripheral development around our cities and towns.
5. That appropriate steps be taken to assure the recruiting and training of qualified field supervisors and enumerators for the

See also Thomas. Simon, "The Case for a Broad-based Urbanized Area Concept," Journal of Marketing, 19, Oct. 1954

1960 census through substituting for political nomination the sole test of qualification.

AGRICULTURE

The census of agriculture supplies basic facts about one of our most important industries. Because of the nature of the industry, with more than five million producing units, there is no agency other than the government capable of assembling comprehensive information about it. The demand for information drawn from the census of agriculture is widespread. In addition to direct use, the census provides benchmarks for most of the current crop and livestock and other estimates.

There is some difference of opinion as to whether a full-scale census is required only once in each decade or more often, with a preponderance of sentiment in favor of a full quinquennial enumeration, as now provided by law.

At the present time there is an important need for a full census covering the crop year 1954. The Committee believes that beginning with the decade of the 1960's a sampling program would provide current data of sufficient detail and reliability to make only a decennial full-scale census necessary.

Some loss in quality and pertinence of data results from taking the census of agriculture in the spring. A fall date, as called for in the amended law providing for mid-decade agriculture censuses, represents an improvement.

Censuses of irrigation and drainage are taken decennially in conjunction with the census of agriculture and are due again in 1960. The Committee believes that studies of these fields prior to that date can lead to economies.

THE COMMITTEE RECOMMENDS:

6. That the full census of agriculture authorized for the fall of 1954 be taken, as a means of bringing up to date the information last collected in the spring of 1950 covering the year 1949. The cost is estimated at about \$23,000,000, or about \$18,000,000 for fiscal year 1955 and about \$5,000,000 thereafter.
7. That the full decennial census of agriculture authorized for 1960 in conjunction with the census of population be taken, but careful consideration should be given to the possibility of shifting those censuses from the spring to the fall, to take advantage of the gains in economy and quality that would result from a fall census of agriculture. The estimated cost of the decennial census is about the same as that given above for the mid-decade census.

8. That beginning in the decade of the 1960's the mid-decade census of agriculture be supplanted by a series of biennial sample censuses of agriculture to be taken for the crop years ending in 1, 3, 5, and 7, and by restricted sample surveys to be conducted for the years ending in 0, 2, 4, 6, and 8. The regular decennial census would cover the crop years ending in 9. Legislation would be required. It is estimated that the sample censuses would cost about \$3,000,000 to \$4,000,000 each and the sample surveys in the order of \$200,000 to \$300,000 each. In the aggregate these sample censuses and surveys would probably cost around \$15,000,000 to \$16,000,000, compared with \$23,000,000 for the mid-decade full census they would supplant.

HOUSING AND CONSTRUCTION

The census of housing, now taken with the census of population every ten years, is the Nation's only complete inventory of dwelling space and conditions.

Interim information on housing is also needed in the formulation of government policy and for manufacturers, marketing analysts, contractors, real estate men, and wholesalers and retailers.

A great deal of work has been done by the Department of Commerce, the Department of Labor, and others on the collection of current information on construction, but the information is spotty and incomplete. The Department of Commerce has a direct interest and responsibility, and through its Office of Business Economics and the Bureau of the Census, can provide both the central staff and the field force to fill in the gaps.

Methods need to be developed for direct field measurement, on a monthly basis, of expenditures on construction. There is needed especially a program for collection of information on the "fix-up" market—repairs and rehabilitation of residential properties.

THE COMMITTEE RECOMMENDS:

- Copy sent of each approved 9-12*
9. That the census of housing be taken regularly with the decennial population census as now authorized. The cost is about \$18,000,000 once in 10 years.
 10. That a mid-decade sample inventory of housing covering about 40 metropolitan areas, chosen by the Bureau, be taken in years ending in 5. The estimated cost is \$1,200,000. Studies should be made to see if more frequent sample inventories of housing should be taken.
 11. That the Office of Business Economics be charged with the responsibility of analyzing construction statistics already available and participating with other agencies in the planning

of an integrated long-term program for compiling data in which the country can have confidence. Toward this end, it is essential that the estimates of monthly construction expenditures, now compiled jointly by the Department of Commerce and the Department of Labor, be made more reliable.

12. That the Office of Business Economics, collaborating with the Bureau, explore the feasibility of developing reliable data on fix-up expenditures for inclusion in the estimates of total expenditures on construction. It is estimated that an initial study fund of \$100,000 would be required.

MANUFACTURES

The authorized quinquennial census of manufactures is the foundation of the industrial statistics program. With it are integrated the annual survey of manufactures and 63 series of current reports, about half of them monthly.

The census of manufactures has provided a comprehensive measure of industrial growth since 1810, and is especially useful for mobilization planning. Groups participating in the Committee's review have emphasized the importance of maintaining the five-year pattern of the census. The industrial data from the latest full census, which covered 1947, are now out of date. Lack of up-to-date detailed data is a severe handicap to business and to government and would present a critical problem in a war emergency.

Classification problems are inherent in industrial data collection. A single kind of classification is insufficient, since industrial operations may for various purposes be classified by type of materials used, type of processes employed, or type of product. More meaningful census figures for many industries would result from uses of multiple classifications.

The Committee believes that the annual sample survey of manufactures should be included in the Bureau's budget as a regular function. Improvements should include refinement of sampling techniques for the smaller companies to permit additional and finer breakdowns; extension of 100 percent enumeration to further industrial groups, especially those of significance in a war economy; and more prompt compilation and publication of results.

The current reports for specific industries, *Facts for Industry*, present the problem of deciding which are in the general public interest and should be publicly supported and which should be financed by the industry concerned. Decision is not easy, since in most cases both a public and a private interest are served.

Emergency mobilization needs for industrial data go far beyond normal peacetime requirements. The peacetime current program

cannot include all the series of data which may be needed in the event of emergency, but can be planned to facilitate expansion of scope and detail when called for. Potential mobilization requirements strongly suggest that the interval between complete industrial censuses should not be permitted to exceed five years.

THE COMMITTEE RECOMMENDS:

13. That the complete census of manufactures scheduled for 1954 on 1953 data be taken in 1955 on 1954 data, and continued thereafter on the original five-year basis. New authority would be required. The estimated cost is about \$3,800,000.
14. That the annual survey of manufactures be continued and strengthened to bridge the gap between these complete censuses, with particular emphasis on the testing and improvement of sampling techniques, the expansion of 100-percent enumeration to include more industries of special mobilization significance, and more prompt publication of results. The annual cost is approximately \$300,000.
15. That, if such adequate annual surveys cannot be provided, the biennial census of manufactures should be restored. It is estimated that this work would increase the decade cost by \$7,500,000.
16. That the Bureau, in collaboration with other Federal statistical agencies and the Office of Statistical Standards, actively seek to provide expanded data on processes employed and materials used and to provide where practicable for the presentation of general census statistics in terms of product classes with a view to making published data for the industries concerned more meaningful.
17. That the *Facts for Industry* reports, being of value to the functioning of the economy and therefore of public interest, be continued. The annual cost of these reports, covering industries with an annual sales volume of approximately \$60,000,000,000, is in the neighborhood of \$700,000.
18. That the Bureau of the Census, in conjunction with the Office of Statistical Standards, continue to review all statistical series in the *Facts for Industry* reports, with the aim of dropping reports of only marginal value and of shifting the cost to private users where they are the primary beneficiaries.
19. That the Bureau continue its search for procedures that will improve the timeliness of the commodity and other reports.

MINERAL INDUSTRIES

Facts on the mineral industries are produced both by the Bureau of Mines of the Department of the Interior, which makes available regular monthly and annual commodity output figures, and the Bureau of the Census, which conducts the census of mineral industries.

The last such census was taken for the year 1939. Under the present law providing for quinquennial censuses beginning in 1948, the Congress provided preparatory funds for the scheduled 1948 and 1953 censuses, but not for the actual conduct of either of them. Consequently, since 1939, there have been no comprehensive data on value of products, industrial and geographic structure, and labor, materials, and capital requirements, nor an adequate benchmark to assure accuracy of current economic measures relating to minerals production.

The President's Materials Policy Commission and other groups have expressed a need for an early census. Under present circumstances, it appears that an adequate census could not be taken until 1955, covering 1954 data.

For the longer term, the Committee believes that a complete census taken once every ten years, supplemented by a short-schedule sample census at the midpoint of each decade, designed to provide State totals, and by the current program of the Bureau of Mines, would be sufficient and would cost less than the present authorized program. The census of mineral industries is planned cooperatively by the Bureau of the Census and the Bureau of Mines to insure that there will be no duplication of governmental effort or of burden upon respondents in the census year.

THE COMMITTEE RECOMMENDS:

20. That authority and funds be requested for the conduct in 1955, on 1954 data, of the census of mineral industries. The cost is estimated at about \$800,000.
21. That the Bureau of the Census further explore with the Bureau of Mines and the Office of Statistical Standards the possibility of conducting the next following quinquennial survey of minerals (in 1959 on 1958 data) on a shorter schedule and on a sampling basis adequate to give reliable facts at the State level.
22. That the next following full enumeration should then be taken in 1964 on 1963 data.

BUSINESS

Complete censuses of business have been taken for the years 1929, 1933, 1935, 1939, and 1948. The 1948 census covered almost 3,000,000 establishments in retail, wholesale, and service trades. The present

law provides for a quinquennial census, but funds were not provided for the census covering 1953. It is clear, from surveys conducted for the Committee, that the census of business is necessary to the most efficient management of distribution.

The Bureau also conducts three useful current sample surveys in the distribution field—appearing as the *Monthly Retail Trade Report*, the *Monthly Wholesale Trade Report*, and the *Canned Foods Report*.

The Bureau of the Census and the Bureau of Old-Age and Survivors Insurance have cooperated in the preparation of *County Business Patterns*. This publication presents statistics tabulated from administrative records of the latter agency and coordinated with census industry codes. It was published annually for 1946–51 and is now scheduled on a biennial basis. It is very useful for marketing purposes.

The Bureau of the Census has planned also to make use of income tax returns as well as Social Security records in conducting the next census of business. To the extent that such data can be substituted for information directly collected, the burden of reporting and the cost of collection are reduced.

THE COMMITTEE RECOMMENDS:

23. That the census of business should be taken with a reasonably complete enumeration once every five years, as now authorized by the Congress, covering wholesale, retail, and service trades in essentially all the local areas covered by the 1948 census of business; and, except as noted below, for the years ending in 3 and 8 as now provided.
24. That legislation and funds be requested to conduct in 1955 on 1954 data the census of business now authorized for 1954 on 1953 data. It is too late to prepare for a census covering the year 1953. The estimated cost is about \$9,000,000.
25. That the next census of business, for reasons of economy, should make maximum use of information on address, kind-of-business, sales, and other relevant items, from the tax returns to the Internal Revenue Service and the Bureau of Old-Age and Survivors Insurance.
26. That present current annual or monthly wholesale and retail sales reports secured through sampling surveys should be maintained on something like the present basis. Efforts should be continued to improve both the quality and the timeliness of these current reports.
27. That the tabulation and publication of *County Business Patterns* from the Social Security records should be continued on a biennial basis.

28. That the Bureau of the Census should push to completion its objective to develop suitable monthly inventory figures for types of stores not covered by the Board of Governors of the Federal Reserve System.

TRANSPORTATION

Transportation is one of the most changing and one of the largest sectors of economic activity in this country. There are serious gaps in the statistics provided by and for this industry. The Congress, in 1948, authorized a census of transportation, and the Bureau has developed a program for bridging certain of the gaps. This program relates primarily to information on motor trucks not covered by the Interstate Commerce Commission and to measurement of the relative traffic flow of the several competing modes of transportation.

The Committee has found broad interest in more and better data on transportation but considerable difference of opinion on specific needs and serious doubts as to the feasibility of parts of the proposed program.

THE COMMITTEE RECOMMENDS:

29. That no further requests be made for funds to carry out the census of transportation authorized for 1953.
30. That the Secretary of Commerce request the Under Secretary for Transportation to explore further the need for a census of transportation and its feasibility, and submit recommendations for either a program or the repeal of the statutory authority.
31. That the Transportation Division, Bureau of the Census, be maintained temporarily with a small staff to continue exploratory and experimental work until such time as a decision is made on the disposition of the transportation census program.

FOREIGN TRADE

Statistics on foreign trade have been compiled by the Federal government since 1790. Collection and publication of foreign trade data are traditional functions of free governments everywhere. The Bureau performs an essential function in meeting public and private needs for these data.

Nevertheless, the Bureau's foreign trade statistics program has been subjected to continual attrition and erosion over the past eight years, and a condition approaching crisis has been reached. Funds have been successively reduced while the workload has increased. The result has been successive abandonment of sections of the program and lowering of standards of quality and comprehensiveness.

The dilemma proceeds from the need for figures in great detail, both in the administration of tariff laws and in the import and export trades. The raw data come to the Bureau in the form of a separate document filed with Collectors of Customs for each foreign trade transaction, and there is, therefore, no opportunity to reduce compiling costs by sampling respondents or by obtaining reports on combined transactions over a period of time.

THE COMMITTEE RECOMMENDS:

32. That adequate funds be requested to permit the Bureau to build up its functions in the assembling and publication of foreign trade statistics under standards of quality—including larger print—and comprehensiveness appropriate to the needs of the world's chief trading Nation. Present costs of the foreign trade program are about \$1,500,000 a year. We are informed that an additional amount of about \$300,000 would permit a reasonable restoration of this program, including the recommendations below.
33. That publication be resumed as soon as may be practicable of the annual *Foreign Commerce and Navigation of the United States* and that editions for the missing years since 1946 be published eventually in condensed form adequate to maintain the continuity of the more important series.
34. That publication be resumed of the *Monthly Summary of Foreign Commerce*.
35. That the Bureau continue its experimentation with modern techniques and electronic equipment aimed at lowering costs and speeding up publication of its foreign trade reports.

GOVERNMENTS

The Bureau is the primary source of figures on governments in the United States, through a program that has been carried on since 1850. The program brings together statistics on the Federal government, the 48 State governments, and approximately 115,000 local governmental units, to provide information on taxation and other governmental revenues, costs, debt, employment, and related subjects.

These facts are valuable to governments, private business, particularly in the finance and investment fields, and in the areas of education and research. Current studies of the proper allocation of fiscal and functional responsibility among Federal, State, and local governments emphasize the importance of timely data.

A 1950 statute authorized a census of governments for 1952 and every fifth year thereafter. Funds for the 1952 census were not provided by the Congress.

The Committee believes that some of the needed data may be more efficiently and economically provided through a partial reliance on sampling techniques, compared with present authorization for two full censuses each decade.

THE COMMITTEE RECOMMENDS:

36. That a complete census of governments should be taken in 1956 to cover the year 1955 and in each tenth year thereafter. This would establish new benchmarks and provide vital information that has not been available since 1942 and not on an effective basis since 1932. The cost would be in the neighborhood of \$2,000,000.
37. That during the intercensal period, a biennial sampling survey be conducted to provide up-to-date trend information on the State and metropolitan area totals for tax revenues, debt, expenditures and employment, and other related facts. The cost of the four biennial surveys would be about \$500,000.
38. That the present census program of limited quarterly and annual reporting of governmental statistics be continued. This program now costs about \$230,000 a year.

MECHANICAL AND ELECTRONIC EQUIPMENT

The Bureau sponsored the development of an electronic high-speed computer and possesses the first installation of that machine. Experience with it has demonstrated savings both in time and in cost. Bottlenecks still exist in the use of the system; there is especial need for a high-speed printer to keep up with the speed of output of the computer itself. Other developments in electronic equipment that will speed up census work include a device designed for the Bureau of the Census at the National Bureau of Standards capable of automatically transferring data directly from questionnaire to magnetic tape, and a more reliable device for transferring data from punch cards to tape.

The Bureau's staff believes that an additional electronic computer would reduce costs and save time in processing the authorized censuses that this Committee is recommending be restored to the Bureau program. The Committee does not feel qualified to appraise that need, but it is impressed with the possibilities of electronic equipment and urges that the need be carefully explored.

The question of acquisition by the Bureau of further large-scale electronic tabulating equipment involves the determination of whether the government should or should not centralize such equipment in one or perhaps a limited number of agencies.

THE COMMITTEE RECOMMENDS:

39. That funds in the amount of approximately \$130,000 be requested at the first opportunity for improved equipment for transferring information from punch cards to magnetic tape.
40. That the work be continued with the National Bureau of Standards on designing and constructing equipment for transferring data directly from questionnaire to magnetic tape.
41. That the Department's interest in the government-wide problem of concentrating electronic equipment be referred to the Bureau of the Budget or to the current Commission on the Organization of the Executive Branch of the Government.

ADVISORY COMMITTEES

As a central statistical service agency, the Bureau must maintain close contact with respondent groups and with persons and agencies outside the Bureau having intimate knowledge of the needs as well as the problems of collecting and publishing statistics. Advisory committees, covering a wide range of economic, civic, and professional interests, have been useful in providing advice and helping to secure public cooperation. They assist in evaluating data, appraising the most essential demands, indicating the best sources, and minimizing the burden upon respondents.

The Bureau has a number of continuing advisory committees, most of them appointed by professional or business associations. At the time of a major statistical undertaking, special technical advisory committees are set up. Use is made also of the system of statistical coordination carried on by the Office of Statistical Standards of the Bureau of the Budget, and of the committees which operate in that system. In addition, major census plans and forms are cleared directly with hundreds of trade associations, trade journals, and individual business concerns.

THE COMMITTEE RECOMMENDS:

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42. That the Bureau continue to make extensive use of broadly representative advisory committees, especially committees for each census and major survey. Wherever feasible, representation on such committees should include respondents to the inquiry as well as users of the results.
 43. That the Bureau experiment with a plan for informal meetings arranged in a number of major cities for the purpose of discussing with representative users of Bureau data their needs for statistics.

DISCLOSURE RULE

The Bureau is prohibited by law from publishing any statistics that disclose information reported for individual persons or firms. The Bureau has maintained stringent administrative controls to assure that individual information is not disclosed and has earned the reputation among respondents for respecting the confidentiality of the intimate records submitted to it. This is an asset of great significance and facilitates the taking of the several censuses. In particular, it encourages cooperation by respondents and minimizes the need for legal action in mandatory censuses.

The Committee believes, however, that in certain respects the law has been interpreted with undue rigidity. Specifically, we believe that a reasonable interpretation of the law would not prevent the Bureau from making available to other Federal agencies for statistical purposes lists of names and addresses of business establishments classified by industries under the Standard Industrial Classification. Making such classified mailing lists available to other Federal agencies to facilitate their administrative and statistical functions would mean a net savings for the government, and would not disclose any information on the operations of responding concerns.

A somewhat different problem is presented when another Federal agency having the authority to collect information on a mandatory basis wishes access to census returns to save both government and business concerns the cost of a duplicating survey. Clearly, the Bureau cannot grant that wish. On the other hand, if the responsible official of a business concern authorizes in writing the Director of the Bureau of the Census to supply a copy of his return to the other Federal agency, we can see no reason why that should not be done.

THE COMMITTEE RECOMMENDS:

44. That the Attorney General be requested to furnish an interpretation of the law on the disclosure rule with respect to the two situations described above.

LEVELING THE WORKLOAD

The Committee recognizes the inherent difficulty in census operations of sharp variation in scale and nature from one census period to another. Wide fluctuations in work level are costly because they hamper efficient use of men and equipment.

Early legislation establishing the Bureau as a continuing agency and later legislation providing for a staggered schedule over a decade of major censuses and interim surveys reflected an appreciation of the need for smoothing out the peaks and valleys of census work. The

Bureau has had extensive experience in shifting its personnel and property from one phase to the next and in using its facilities for other statistical operations of the government during low periods.

THE COMMITTEE RECOMMENDS:

- 45. That emphasis continue to be placed on leveling the fluctuations from year to year in the workload of the Bureau, through proper scheduling of major censuses and surveys and through use of Bureau facilities for other statistical operations of the Government.**

PUBLICATION

The principal end-product of the work of the Bureau is the publication of statistical reports. The Bureau's current programs alone produce about 1,000 pages of printed material a month. When a major census is being compiled the output may reach a level of 5,000 pages monthly.

The most frequent complaint about the Bureau's publication program relates to timeliness. The goal of promptness of publication competes with the desire to maintain high standards of completeness, accuracy, and presentability.

Undue economy in publication may inhibit readability. Some instances of small type size and other format details affecting legibility have been called to the Committee's attention.

The present government policy on distribution of publications limits free distribution to specified exempt classes and requires the general public to pay for copies of reports, as well as for special compilations.

Determination of what is to be compiled and published requires careful balancing of competing demands. The Bureau is required to keep in close touch with users of its statistics in order to appraise these demands.

THE COMMITTEE RECOMMENDS:

- 46. That further steps be taken to achieve more prompt publication of results of censuses and surveys.**
- 47. That the Bureau review its publication formats and improve those which, by reason of small type size or other factors, are difficult to read.**
- 48. That the Bureau continue its present policy of carefully restricting free distribution of publications to specified exempt categories of users, and impose a fair price, based on printing cost, upon all other recipients of reports.**

49. That the Bureau make full use of advisory committees to assist in determining the form and content of census publications.

PROFESSIONAL STAFF

The chief resource of the Bureau is its professional and technical staff. Notable progress has been made over the past two decades in expanding this central staff.

Trained and experienced personnel are needed not only for carrying out current operations, but for careful planning of future undertakings. A trained nuclear staff can pay for itself and more in developing more efficient procedures and in providing improved services to the public.

THE COMMITTEE RECOMMENDS:

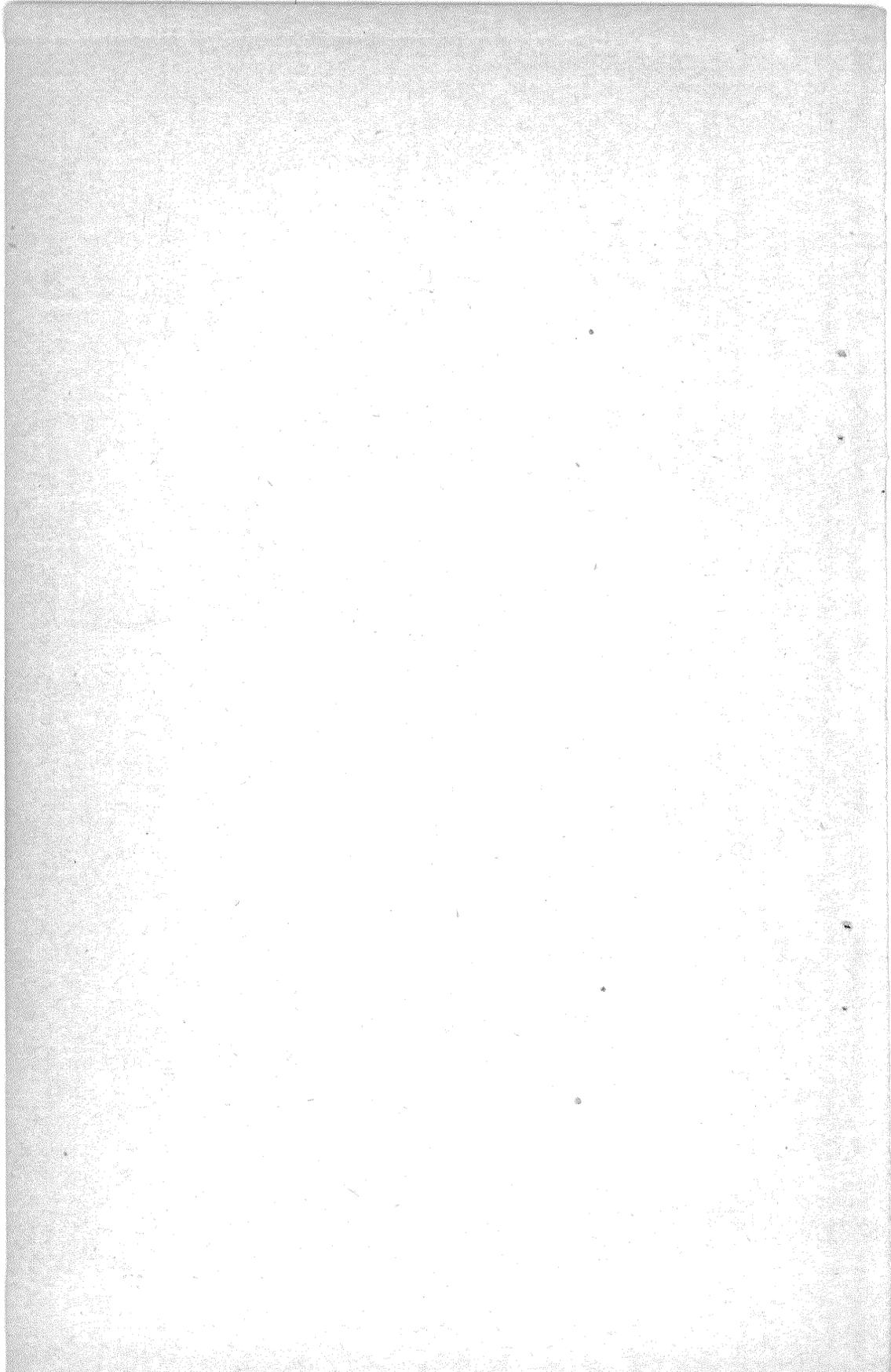
50. That increased emphasis be placed upon the development and maintenance of a nuclear professional and technical staff for planning, research, experimentation, appraisal, and consulting; and that adequate funds be allocated for that purpose.

SAMPLING AND RELATED RESEARCH

Since the late 1930's the staff of the Bureau has demonstrated on numerous occasions that sampling methods can improve the timeliness and reduce the cost of collecting and processing data.

THE COMMITTEE RECOMMENDS:

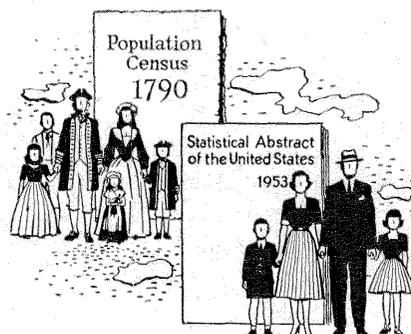
51. That work on further development of sampling and related methods be vigorously supported.



PART II.—PROGRAM APPRAISALS

POPULATION

The oldest and by far the largest of our censuses is the decennial census of population. Authorized and directed to be taken by the Constitution of the United States, the first such census was taken in 1790 by the Federal Marshals and Assistant Marshals in the Federal judicial districts. That census yielded total enumeration of 3,929,214 persons,



and is generally regarded as the forerunner of systematic national censuses, although earlier smaller censuses had been conducted in Virginia (1624-1625), Quebec or "New France" (1666), and Sweden (1748). Other national censuses followed in 1801 for England, 1801 for France, 1861 for Italy, 1871 for Germany, and 1897 for Russia.

Content

Enumeration of the population of our country over its continental expanse is an enormous undertaking, requiring, for the 1950 census, the temporary employment of some 160,000 persons and an expenditure of some \$60,000,000. That census enumerated 150,697,361 persons and covered age, sex, residence, relationship to head of household, marital status, and number of children ever born; color or race, country of birth, country of birth of parents, and citizenship; State of birth, change in county of residence and in farm residence during the preceding year; school attendance and highest grade completed; employment status, occupation, industry, class of worker, hours worked, and weeks worked in 1949; and income in 1949 by source for individuals and for families. Some of this information was obtained by complete enumeration, some by a sampling approach. It was truly a national inventory of our principal resource—people.

The number and characteristics of the population of the country are enumerated and reported by States, metropolitan areas, cities, urban places, counties and minor civil divisions, as well as the urban, rural-farm, and rural nonfarm areas. And for many cities the figures are broken down by census tracts, affording an invaluable tool for city planning, housing, zoning, welfare, and development agencies, and for interested groups in the private economy as well.

Uses

Results of the census of population are used almost universally as guides to the successful functioning of our free society. Among these uses may be mentioned:

1. Reapportionment of representation in the House of Representatives, as directed in the Constitution.
2. Reapportionment by State legislatures.
3. Annual apportionment of many millions of dollars of Federal funds to the States and large amounts of State funds to counties and incorporated places.
- ✓ 4. Computation of birth and death rates, location of hospitals, clinics, and other health and welfare facilities, analysis of health and welfare problems.
- ✓ 5. Determining future enrollment in schools, high schools, and colleges; determining the population of military age and the size of the group attaining draft age in future years.
6. Determining present and future demand for public utility services.
7. Estimating the present and future demand for consumer goods.
- ✓ 8. Determining the location of new manufacturing plants and other business establishments.
9. Analyzing the Nation's manpower, its labor markets, and the occupational characteristics of the population.
- ✓ 10. Research on problems of the aged population and other population groups.
- ✓ 11. Planning housing and urban and area development programs.

Interdecennial estimates and projections

Included in the work of the Bureau of the Census in the field of population are the estimating of population for interdecennial dates and projections for future periods, both in totals and by age groups. Technical suggestions and guidance have also been supplied by the Bureau's staff to other agencies in their construction of more detailed or specialized population estimates.

The reports of the Bureau on current and future population estimates are widely used and have served to emphasize the importance to our economy of the upsurge in population growth over the past decade and a half.

The usefulness of these estimates and projections in many thousands of public and private fields is readily apparent. They are used, for example, in allocation of Federal and State grants-in-aid; in the computation of current birth and death rates and other rates in the fields of health and welfare; in the setting of sales quotas and in measuring sales penetration; in determining marketing and advertising programs; in determining plant locations; and so on.

Current population survey

The current population survey is a more recent but very significant part of the population program, in operation since 1940. A low-cost sample survey of about 25,000 households, it was designed primarily to measure total unemployment; but in its development it has been made to yield many other figures on the activity and characteristics of the population. It has been a powerful tool for constructing current national estimates of the extent and duration of unemployment, the extent of underemployment, the numbers of people employed, the size and characteristics of the labor force, and other pertinent facts of significance for current national policy.

From time to time, supplementary inquiries yield information on such subjects as migration, family composition, marital status, changes in number of households, doubling up of family groups, education, characteristics of the farm population, and changes in family income. This information is of significance as current indicators of the condition of the economy and as guides to public and private policy. The survey serves also as a source for estimates of the extent and nature of the country's manpower reserves to meet a defense emergency.

Labor force statistics

Because we have a highly developed and complex economic structure, we must know in what occupations our people are engaged, in which industries and in what localities they work. We also have to know how many of them are at work, are looking for jobs or are temporarily or permanently out of the labor force and how they fare. The information so collected is essential not only for appraisal of our past performance, but even more so as a key to our future economic potentialities. A multitude of economic analyses relies on the labor force information. It is needed and used at all levels: by national, State, and local governmental authorities, by business and labor organizations, by research and educational institutions.

The Bureau provides an important share of our basic information about the gainful activities of our population. Decennially, as a part of the total population count, the census provides a pinpointed description of the country's manpower, by locality, detailed occupations, industry, age, sex, income, etc. This periodic inventory with its mass

of local detail provides the basic point of departure for subsequent local, regional, and national studies and projections.

The decennial census is supplemented, on a national basis, by monthly estimates of the economic status of our population, through the Bureau's *Monthly Report on the Labor Force*—a product of the current population survey. The estimates, derived from a small sample of about 25,000 households, provide, with some margin of error, a prompt and inexpensive national breakdown of population and labor force into their major subdivisions. As such, the estimates supplement the other types of indispensable information on employment by industries and localities collected from individual establishments by other government agencies—the Department of Labor, cooperating State agencies, and the Department of Agriculture.

Monthly information on employment, unemployment, and the labor force is essential in helping the Federal government to detect current changes in general business and labor conditions and thus to fulfill its obligations under the Employment Act of 1946. Additional information on the labor force is also derived from the Bureau's activities in the fields of manufacturing, trade, service, and agriculture.

The importance of information on the labor force suggests that it is unwise to collect this information less frequently than in the past or to cut down materially the amount of information previously secured in the course of decennial enumerations or monthly surveys. It is important to strengthen the monthly labor force sample to insure its greater sensitivity and representative national character. Toward this end, the sample is currently being strengthened by increasing the number of geographic areas, from which the sample of households is drawn, from 68 to 230. Further suggestions and recommendations are presented in the report to this Committee by the Panel on Labor Force Statistics, in the Exhibits accompanying the Committee's report.

The regular monthly sample can never be sufficiently large to permit interrelating the finer details on the individual's status within or outside the labor force with specific demographic factors without making the costs excessive. If such information is needed on special occasions, such as a national emergency, we believe it could be secured through temporary expansion of the sample.

Mid-decade census

There is a demand in many quarters for the conduct of a simplified population census, covering only the basic population questions, at the midpoint of the decade. It is stressed by the proponents that our population is growing rapidly and has become unprecedentedly mobile; and that in consequence we need, for both public and private purposes, more accurate and more up-to-date figures on the distribution of the population, in addition to the present estimates nationally and by States.

The Committee recognizes the need emphasized by those who use smaller-area population figures in public utilities, real estate, housing, health services, education, and welfare services; but it is also concerned over the costs of a quinquennial population census added to the indispensable decennial population census. Resources are limited, choices must be made among desirable census programs, and we are not convinced that an interdecennial population census, even on a limited-question basis, would justify the cost. It is our belief that the population census should remain on a decennial basis, supplemented as now by the current population survey on a sampling basis.

It should be stressed, however, that the Bureau's research and experimentation with sampling methods may lead to possibilities of relatively low-cost sample surveys for estimating population of metropolitan areas, counties, and cities of certain minimum-size limits. There will remain, also, the possibility of conducting a simple and abbreviated-schedule population census in response to some emergency need. Research into these various possibilities impresses the Committee as more important at this stage than provision for a regular mid-decade population census.

Simplified decennial census

The Population Panel reporting to this Committee has recommended that consideration be given to limiting the complete enumeration in the decennial population census to some of the principal items, and the other questions to be asked only on a sampling basis, for example, of every fifth person enumerated. We believe that would permit a significant saving, running perhaps to between 10 and 20 percent. It would also permit the speeding up of publication of the results by a significant time margin, adding to their usefulness.

There is always a demand for increasing the number of questions to be asked in the decennial enumerations of our population. However meritorious many of these requests are, there is a limit to what may be asked. There are also physical limitations in terms of what the enumeration forms can hold and of what can be tabulated within a reasonable time.

The task gets bigger with every succeeding enumeration, merely as a result of the increase in our population. This increasing magnitude calls for careful scrutiny of questions to be included as well as for economy in the collection and processing of information.

The Bureau is exploring various techniques for the use of enumeration forms which would permit more rapid processing of information as well as possibilities for improved tabulating techniques and equipment. At the same time, continued investigation is going on in the use of sampling techniques to determine what could be collected by partial

enumeration without impairing unduly the value of the wanted information.

Even if sampling is used, as it was for income, education, and some other questions in 1950, the main demographic items must be gathered on a complete enumeration basis for legal purposes. Certain other items may be needed on the same basis for small-area benchmark purposes. For example, the Panel on Labor Force Statistics believes that the questions on occupation and industrial attachment should be based on complete enumeration.

The Committee believes that research and consultation on these possibilities should be continued with a view to planning the 1960 population census on a simplified basis. Even a so-called complete enumeration can never be 100 percent accurate, and reasonable margins of error for small areas may be found to be permissible on certain items.

Metropolitan areas and urbanized areas

The staff of the Bureau has over the past two decades or so made a noteworthy advance in developing the concept of metropolitan areas and urbanized areas, in refining its concepts and measurements of such areas, and in greatly increasing, in the census of 1950, the number of areas for which detailed census information is presented.

The development of means of rapid transit and particularly the all-important development of automobile, truck, and bus transport and the concurrent development of a network of paved roads, highways, and express highways, has largely rendered meaningless for many economic purposes the limits of towns, cities, and even many counties. In consequence, the population and other census information for such political units is frequently misleading for the purposes of economic and business planning and for much public planning as well, although remaining important for other purposes.

Clearly, the major need for such economic and business purposes is population and other facts on the economic and social area clustering about the central city. The urbanized areas, of which 157 are defined and presented in the 1950 census, along with the 168 standard metropolitan areas composed of counties, meet these needs. The usefulness of these figures is so great and the need is such a rapidly growing one that the Committee believes plans should be made for a great extension of the number of urbanized areas for the 1960 census.

At present, such areas are limited to those clustering about central cities of 50,000 or more population. With the increasing emphasis on all phases of marketing planning, with its great need for facts on markets large and small, we believe that this limit is too high.

In the aggregate, the market potentialities of the areas clustering about the smaller cities and towns are very considerable. The trend throughout the country is toward building up the peripheral areas

around towns as well as cities, and there are many reasons for believing that this trend will continue and in fact grow in intensity.

Whether the need is for facts on markets, on housing, on labor supply, on manufacturing or other business activity, or on any other phase of census coverage, there is a growing demand for information on the economic and social area, in addition to figures on political units. We do not have a basis for suggesting the central-city minimum limit for urbanized areas coverage, but we believe it should be as low as resources will permit. Even many towns of 5,000 to 10,000 population will be found to have their peripheral areas, and the trend toward almost universal peripheral development is growing.

Selection of enumerators

Another problem is that traditionally imposed on the Bureau by the procedures involved in the selection of supervisors and enumerators for the conduct of the decennial census (including the census of agriculture). At best the task of selecting competent and reliable persons for this temporary employment for a few weeks once in ten years is a difficult one; and it is understandable that in the past political nomination by the majority party at the time of the census would have been resorted to. Today, however,—and speaking more precisely of the next census, for 1960—it must be said that these political procedures are a legacy of an outmoded past. With the creation and development of the State Employment Services and the United States Employment Service, and the development of methods and techniques for recruiting and training, there can no longer be any justification for resort to those outmoded procedures.

Under those procedures, the careful planning of the Bureau for the decennial censuses has tended in some if not many areas to lose much of its effect through employment of supervisors and enumerators unqualified for their work. The results of the decennial census are of such importance to our economy and to our society generally that the same careful planning should go also into the selection of field supervisors and enumerators. Qualification should be the sole criterion for employment.

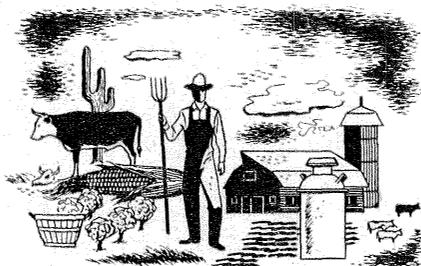
It is the belief of this Committee that the Members of Congress would willingly forego this small patronage. Through long resort to that practice (with the exception of the census of 1880), it has been accepted as an unquestioned tradition; but this committee believes that the leaders of the Congress, both majority and minority, need only to have the problem brought to their attention to deal with it in a manner appropriate to the conditions of the present age. The stakes are large in terms of the indispensable decennial census results, and the patronage sacrifice would be slight.

Recommendations

See numbers 1 to 5, pages 4 to 5.

AGRICULTURE

The census of agriculture is the basic source of information about the agricultural industry. Agriculture employs around 10 percent of the total labor force and affects directly the lives of some 25 million farm people. In addition, many thousands of business concerns look to the farm market as their principal outlet and are constant and extensive users of agriculture data. This information is also of vital concern to many government agencies and to the Congress. The gen-



eral public also uses data based on the census of agriculture almost continuously.

Because of the nature of the industry, the users of agriculture data are more dependent on national data-gathering agencies than those in most other lines of business. The industry consists of more than five million producing units. Hence, there is no agency other than government that is capable of assembling comprehensive information about it.

Uses

The Committee's review indicates that the demand for information drawn from the census of agriculture, or based on it, is extremely widespread and insistent. The needs of the Congress and of the government agencies for figures on agricultural production, incomes, prices, costs, indebtedness and a great variety of other items are well known and require little stress here. The current types of farm programs could not be administered without a wealth of facts about the industry and the locations and magnitudes of the various kinds of production. Nor could the Congress legislate intelligently in this realm without the flow of information that has now come to be taken for granted. What is less well known is the very extensive use of such data by business firms in locating plants, planning sales campaigns, estimating future volumes of business, and developing new machines and products.

Most of the current estimates, many of them produced by other agencies, are based on the agriculture censuses and could not be made without the benchmark facts provided by these periodic enumerations. It should be recognized, therefore, that if the census of agriculture is weakened or thrown off schedule, we are striking at the roots of the tree rather than merely lopping off some of the branches. The Committee's review indicates that the users of agriculture data in business, in government, and in almost innumerable other connections, are substantially in agreement on this point. They are likewise practically unanimous in urging that the censuses cover at least the present range of subject matter. The business groups emphasize particularly the importance of small-area figures (such as those for counties), which can be made available only through complete enumerations.

This is not to say that economies and improvements in efficiency cannot be made. These are discussed below. The important point to be made here is that there is a widespread and insistent demand for agricultural facts supplied by the census or based on it and that this demand is at least as strong among the business groups and in the government as among the farm organizations themselves.

Economies and improvements

If it be granted that a continuing and comprehensive flow of information on agriculture, largely based on census enumerations, is essential to a highly developed and complex agriculture such as ours, the further questions to be raised are: How can such information be provided in the most efficient and economic way? How often should censuses be taken? Are there items or processes that could be eliminated without serious loss?

On these points, there are bound to be differences of opinion. Some groups use one kind of data; others, some other kind. Each user is, of course, most concerned with the kinds of information he uses most in his own business or administrative activity.

The number of items that can be included in a given enumeration is limited both by the size of schedule that can be used practically and by the amounts and kinds of information farmers can be expected to give willingly. In general, both the requirements of the government agencies in preparing data on acreage, production, and value of crops and livestock and the provisions of the law imply a requirement that virtually all kinds of crops and livestock be included.

Since the numbers of crops and kinds of livestock are very large, the inclusion of all of them leaves little room for questions on many other phases of agriculture which are much desired by large groups of users. Business groups in particular want more information on the numbers and kinds of facilities and equipment in use.

Researchers and educators want more data on land use and tenure,

farm indebtedness, the use of hired labor, and a great variety of other items.

The Bureau seeks to reconcile these competing demands by relying heavily on broadly constituted advisory committees representing the farm and business groups, the government agencies, and those concerned with research and education. At best, however, the number of items requested by various groups usually has to be trimmed down from between 600 and 800 to something in the order of 200 to 250. Those who want more economic and social information about agriculture contend that some of the less important kinds of crops and livestock should be omitted. The Department of Agriculture and the growers of these more localized farm products maintain that they must have information about these kinds of production even though they are not grown generally over the United States.

The Bureau has eased this problem to some extent by using special schedules for different regions, thus avoiding asking for data on crops not grown in the region to which the particular schedule applies. It still is impossible to include in the schedules of the regular censuses many of the items that are desired by sizeable and important groups; for example, the amounts of fertilizer and spray materials used, age and type of equipment, and some types of farm expenditure.

This problem of obtaining a wider range of information has been given much consideration in the Bureau of the Census and in the Department of Agriculture. It is discussed more specifically in the Committee's conclusions.

Many of the users of agricultural data are concerned mainly with overall aggregates; that is, total production, total acreage, numbers of farms and so on. At least two important groups are keenly interested in obtaining farm data by counties and other small units and want them at frequent intervals. The most important users who stress this need are the Federal and State agricultural agencies and the business groups, particularly the agricultural press and the businesses which sell to or serve primarily the agricultural areas.

Nearly all other users stress the need for full enumeration and small-area data at least every ten years; but some would be willing to forego the mid-decennial complete enumeration if they could thereby obtain national, regional, and possibly State totals on a wider range of items such as could be obtained during the interdecennial periods by means of sample censuses and sample surveys.

The Committee's review indicates that the preponderance of sentiment, notably that in the agricultural press and business groups and in the Department of Agriculture, favors the full quinquennial enumeration. The first groups want these figures as a basis for establishing market potentials, determining locations of plants and distributing outlets, and so on. The Department of Agriculture emphasizes the

rapid changes now occurring in agriculture and the need for frequent benchmark data to keep its crop and livestock and other estimates as accurate as possible.

Both groups also want additional types of agricultural information, which sets up an objective that is not compatible with the procedures that have been most commonly used in the past. To overcome this latter difficulty, both the Department of Agriculture and the Bureau of the Census have long had under study the possibility of supplementing the decennial and quinquennial censuses with an annual or biennial sample survey in which questions could be rotated so as to provide at least national and regional totals for a wider range of items.

The technique of sampling has now progressed far enough so that it can be demonstrated that a properly designed sample can provide reliable estimates of national and regional totals and, if the sample is large enough, State totals as well. It cannot provide county or other small-area data since the number of respondents queried in a small area is not large enough to make possible reliable estimates.

For the sampling technique to be most effective, it must be based on periodic full enumerations. The accuracy of the estimates based on samples will be greater if the full enumerations can be made at five-year intervals than if dependent on enumerations at ten-year intervals. Sampling procedures can be used with enumerations made only once in ten years, though with some loss in accuracy. Since 1920, the judgment of the Congress has been that such rapid changes were occurring in agriculture that full enumerations at five-year intervals were needed; and the authorizing legislation now provides for mid-decennial as well as decennial full enumerations. Such mid-decennial censuses were taken in 1925, 1935, and 1945, and the Bureau is directed under existing law to take such a census in the fall of 1954 covering the crop year 1954.

Conclusions

On the basis of its review and the report of the Panel on Agriculture the Committee presents the following conclusions:

1. The agricultural economy as now organized cannot operate efficiently without a continuous flow of dependable information covering a very wide range of operations. The views expressed by farm organizations, business groups, government agencies, State institutions, and the general public are conclusive on this point; and the Committee has found almost no dissent from any informed individual or group.

2. Though many of them are put out by other agencies, nearly all of the numerous estimates and tabulations relating to agriculture are based on census enumerations and could not be continued effectively without the periodic benchmarks and comprehensive facts provided by the census.

3. There is no private agency, or group of agencies, that could obtain the kinds and amount of data provided by the census of agriculture. The number of enterprises to be covered is so large and the cost so great that even the largest of the private agencies would be entirely inadequate for carrying out an enumeration of this kind.

4. There is unanimous agreement that, whatever the time periods between enumerations, the censuses should be taken at regular intervals and in accordance with a schedule established long ahead and on the basis of carefully considered plans. Short-period changes are very expensive, are detrimental to the quality and usefulness of the data, and contribute directly to the kinds of inefficiencies we are seeking to overcome. Not only does a deviation from planned schedule lead to the wasteful scrapping of preliminary preparatory work, it also forces upon businessmen, government agencies and other users very significant costs in making special computations and adjustments to bring off-schedule data into harmony with those provided in earlier and later enumerations.

5. The full census of agriculture should continue to be taken decennially as it has been since 1840. Further study should be given to the feasibility of taking it at a time other than that of the decennial census of population, as a means of evening up the load and thereby to use more efficiently the facilities which the Bureau must maintain for handling the decennial census of population and housing, which constitutes a heavy load at the decennial periods.

No change should be made of the years in which the decennial census of agriculture is to be taken unless and until it has been established almost beyond question that the new time schedule is one that can and will be adhered to in the future. A temporary change of timing would involve great wastage of both public and private funds and much deterioration in the usefulness of the data. (This does not apply to a change to a different month within the same fiscal year. There would be evident advantages in shifting the decennial agriculture census to a fall date.)

6. There is clear evidence that census data on the changes in agriculture are needed in the periods between the decennial censuses. Changes in the amounts, kinds, and locations of agricultural production and in many other phases of agricultural operations are now occurring so rapidly that crop and livestock estimates and many other types of agricultural information cannot be kept accurate and up-to-date without either a quinquennial census or some alternative well-planned procedure for frequent and adequate checks and benchmarks to assure the accuracy of estimates. Many billions of dollars of business transactions in farm products are carried on annually on the basis of estimates derived from census data. If such estimates are inaccurate or lacking, the prices received by farmers may be seriously

affected and the government itself may incur heavy losses because of inadequate knowledge of the volumes of crops likely to come onto the market.

The laws now in effect authorize full censuses covering the crop years ending in 4 and 9. The Panel on Agriculture reporting to this Committee has urged strongly that this program be supported and recommends that appropriations be made for taking the census authorized for the fall of 1954. The Department of Agriculture and many of the business firms that sell to farmers also urge the taking of a full agriculture census in 1954 as a means of bringing up to date the information for national, State, and county units which was provided by the census of 1950 covering the crop year 1949.

In view of these strong representations by large groups of important users of agriculture data, this Committee recommends that provision be made for a full census of agriculture in the fall of 1954.

7. As a longer term proposal, the Committee believes that a different type of interdecennial program consisting of a series of biennial sample censuses supplemented by smaller-scale sample surveys in the years in which sample censuses are not taken would provide more kinds of data on a more timely basis and at less cost. It would also make the workload of the Bureau more uniform and would spread the costs more uniformly over the decade.

Since such a program could best be initiated immediately following a full census, the Committee recommends that this staggered plan, consisting of four biennial sample censuses for the crop years ending in 1, 3, 5, and 7, and five sample surveys for the years ending in 0, 2, 4, 6, and 8, be initiated immediately following the census of 1960 covering the crop year 1959. By this means, data on changes of many kinds could be kept up to date, reports could be issued much sooner than those resulting from full censuses, and the estimates of crop production and livestock numbers could be improved. It would also be possible, by rotating some of the questions asked in the sample censuses and surveys, to provide at least once in 10 years information on many aspects of agriculture that must now be omitted in the full censuses. The sample censuses proposed would give reliable national, regional, and State totals. The sample surveys which would cover fewer farms would be designed to provide reliable national and regional estimates only.

The cost of taking a full quinquennial census of agriculture is estimated at \$23,000,000; that of taking a sample census large enough to provide national, regional, and State totals for most items would be \$3,000,000 to \$4,000,000. Sample surveys would cost in the order of \$200,000 to \$300,000 each. Thus, the cost of four sample censuses and either five or six sample surveys would be in the order of \$15,000,000 to \$16,000,000 for the decade as compared to the \$23,000,000 estimated as the cost of a full quinquennial census.

Though we favor the adoption of such a program of sample censuses and surveys as that outlined above as soon as that can be done practically, we do not think such a program could be put into effect satisfactorily as early as the fall of 1954, which is the date now scheduled for the next census of agriculture. The most recent census of agriculture relates to the crop year 1949. Many changes have occurred since then. We, therefore, urge provision for the regularly scheduled full census in 1954.

The shaping of plans for an adequate sample census will, we believe, require more time than is available between now and the fall of 1954. Also, the sampling program should, if possible, be started immediately following a full census, as the layout of the samples can then be made in such a way as to get the most efficient results. It is for these reasons that we suggest deferring the initiation of such a program until after the 1960 decennial census is taken.

The shift from a full mid-decade census of agriculture to sample censuses and surveys would represent a very significant step and it is of the greatest importance that preparations be carefully made before such a shift is undertaken. These sampling methods hold great possibilities of economy in costs and improvement in quality and timeliness of results. We believe, therefore, that it is important that the validity of both crop and livestock estimates and sampling methods be not imperiled by a premature shift to a sampling basis.

8. Since the plan described above would not provide the county totals so strongly urged by several important groups, we recommend that a careful study be made of the extent to which county and State data do become obsolete within the decennial periods, and of the possibilities of making adjustments in them on the basis of national sample censuses and sample surveys which would make them reasonably usable for most types of business and other purposes. If such a solution is found feasible, a well-planned program of sample censuses and sample surveys for the periods between the decennial censuses would provide data on many items that must now be omitted, would aid in improving national estimates of crop and livestock production, and would still provide modified county totals that would be accurate enough for most business and other uses.

9. A settled program for full agricultural enumerations, sample censuses, and sample surveys to be followed from 1960 on, should be developed by the time of the 18th decennial census in 1960. Appropriate legislation would be required. Such legislation should not be unduly rigid. There should be both opportunity and encouragement for the introduction of improvements and economies. The general framework for these activities should be set up and appropriations should be made in accordance with an agreed plan. Census operations for a country as large as the United States require large-scale and time-consuming preparation. They cannot be suddenly turned

on or off without wastage of public funds, serious deterioration in usefulness, and extra expense to users.

10. If the decennial censuses of population and agriculture are to continue to be taken concurrently, both cost savings and quality improvements would result, so far as the census of agriculture is concerned, by shifting them to a fall date. When the census is taken in April, the Department of Agriculture finds it necessary to adjust the data on livestock numbers to make them comparable with those derived from the mid-decade censuses, which are scheduled for October of the year covered, and to its own estimates, which are as of January 1. This involves extra expense and some deterioration in data because of the estimates that must be made.

More serious is the loss in quality that results from use of the April date. Many tenant farmers shift from one farm to another during the winter and spring months. Since the farmer must report for the farm on which he lives at the time of the enumeration, rather than for the one he operated during the year to which the data apply, he is often obliged to report on many items for which he has inadequate information. Furthermore, in April most farmers are working against time in their efforts to get crops in and, hence, are reluctant to take time to give careful replies to the questions asked. Furthermore, since the decennial agriculture census covers the crop year ending in 9, such a change would permit release of the data some five months earlier than if the April date were used.

11. Censuses of irrigation have been taken since 1890 in conjunction with the decennial census of agriculture, and similar censuses of drainage have been taken since 1920. The time available to this Committee has not permitted full exploration of the uses of and needs for these censuses. This Committee believes that some economies can be achieved by transfer of some items in these censuses to the agriculture schedule, by elimination of some items, and possibly by the collection of part of the data through other channels.

Since decisions relating to these censuses will not have to be made until plans are being made for the 1960 decennial census, the Committee recommends that further study be given by the Bureau and the Department of Agriculture to the need for and usefulness of these censuses and that census activity in these two fields be reduced to those items and procedures which are vital to essential uses and which cannot be obtained either by transfer to the census of agriculture or by other methods. The cost of the census of irrigation is in the order of \$500,000 and that of the census of drainage about \$225,000.

Recommendations

See numbers 6 to 8, pages 5 to 6.

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HOUSING AND CONSTRUCTION

Not only do we need information on how many people live in the United States, but also on how they live. The census of housing, now taken with the census of population every ten years, as required by the Housing Act of 1949, is the Nation's only complete inventory of dwelling space and conditions. It measures our housing standards.

Decennial census of housing

The 1950 census provided information for each dwelling on: type of living quarters (whether house, apartment, trailer, etc.); type of structure (whether detached, semidetached, or attached); number of dwelling units in structure; whether or not there was a business unit in the structure; condition of unit (whether or not dilapidated); number of persons and number of rooms in the unit; piped water supply; type of toilet and whether for exclusive use or shared; installed bathtub or shower and whether for exclusive use or shared; whether the dwelling unit was occupied or vacant, and if occupied, whether by owner or renter; for vacant units, whether on the market for rent or sale, or for seasonal use only, and the rent or sale price asked; for nonfarm units occupied by owner, value of 1-dwelling unit properties and whether or not mortgaged; for nonfarm rented units, contract and gross rent. In addition, the following information was secured on a sample basis: heating equipment and fuel; presence or absence of electric lighting; type of refrigeration; radio and television; kitchen sink, for exclusive use or shared; cooking fuel; and year structure was built.

As part of the housing census, a survey of residential financing was undertaken to ascertain such facts as the type and value of mortgages held on dwelling units, rate of interest, method and frequency of payment, and mortgage delinquency. This information was secured for certain residential properties from a sample of owners and of mortgagees.

The housing portion of the last decennial census cost about \$18,000,000 or about 20 percent of the total. The cost of the 1960 census of housing, with similar information required, would probably be of that order or somewhat higher, since there will be more dwelling units.

Mid-decade housing inventory

If we are to understand and learn more about our environment—about our living standards—the decennial census of housing is a minimum requirement. It provides benchmark information. More is needed, to fill in our knowledge between censuses.

Much can happen in ten years, such as the shift from central city areas to the suburbs, which regained vigor during and after the war; the change in the character of homes, from two-story row dwelling to one-story ranch-type homes; the movement of industry to the South,

Southwest, and West Coast, with consequent new demands for housing facilities, public utilities, community services.

Information on these changes is necessary for governmental planning and is helpful to manufacturers, marketing analysts, contractors, real estate men, and wholesalers and retailers. Areas of new housing developments are business opportunities—for stores, services, and factories. Industries want to locate near a potential labor supply, which means a locality with dwelling space.

Interim information is necessary in the formulation of government policy. As an example, in the 1950 census, about 4,300,000 out of 46,000,000 homes were described by census takers as "dilapidated." But about 5,000,000 new dwellings have been provided in the last 3½ years. Does that mean the gap has been virtually closed? Does that mean Federal, State, and local governments can conclude that public aids to housing are unnecessary?

Some observers believe that we still are under-housed, that the new homes were largely for persons with higher incomes. But others contend that we now have adequate housing for the most part. Neither side can be sure.

As a step toward adequate knowledge of construction and housing, this Committee believes that a sample inventory of housing should be taken in 1955 and succeeding mid-decade years. This would provide interim information on the number of dwelling units, type of quarters, condition, and so on. It would be a limited census, so designed as to yield separate data on about 40 strategically located metropolitan areas. In this way, it would afford information on housing in some metropolitan areas as well as nationally.

Such data would be helpful to city planners, builders, and economic analysts concerned with housing trends and developments. The cost would probably run to \$1,200,000. Witnesses and letters to the Committee have indicated a demand for sample surveys on the conversion of one- and two-family dwellings into three- and four-family units and for data on demolitions. Such information is sought to build up an interim inventory of housing. If the mid-decade sample were taken, this gap would be filled every five years and would afford time to determine whether more frequent inventories on a sample basis were needed.

Current construction reports

A great deal of work has been done and is being done on the collection of current information on construction. Today the Department of Commerce and the Department of Labor jointly develop a monthly estimate of total construction activity. Unfortunately, the estimate is based on information that is spotty and incomplete. Yet it encompasses one of the most significant economic activities in the country,

amounting to nearly \$40,000,000,000 a year, or more than 10 percent of the total output of goods and services.

A great deal must be done to improve, extend, and fit these data together into a comprehensive, dependable series. This integration has not been achieved because construction statistics have been gathered by so many agencies, public and private.

The Department of Commerce has a direct interest and responsibility, and with the help of the Office of Statistical Standards of the Bureau of the Budget and other agencies, public and private, it can supplant statistical confusion and guesswork with order and reliability. Through its Office of Business Economics and the Bureau of the Census, the Department of Commerce can provide both the central staff and the field force to fill in the gaps in existing information.

To this end the Committee suggests that the Office of Business Economics be charged with the responsibility of making continuing analyses of construction data. Specifically, the Committee believes that the Office of Business Economics and the Bureau of the Census should inaugurate a program for collection of information on how much homeowners and landlords spend on repairs and rehabilitation of residential properties. This is referred to as the "fix-up" market; estimates of its annual volume range from as low as \$4,500,000,000 to as much as \$9,000,000,000, or from a third to three-quarters of the amount spent on new housing. The margin of guesswork here is large.

Information on fix-up expenditures on residential properties might be developed through field work by the Bureau as part of its current population survey. The Committee believes that these field studies should be initiated promptly, with the intention of eventually providing monthly estimates of fix-up expenditures. Techniques should also be developed to provide as soon as possible information on the volume of fix-up expenditures on nonresidential properties.

The monthly estimates of expenditures on housing and nonresidential construction are compiled from a variety of sources, public and private. The Department of Labor collects information on new housing starts and public construction. The Department of Commerce assembles information on nonresidential construction from data gathered by F. W. Dodge Corp. and others. Extensive adjustments have to be made for under-coverage in many sectors, most notable of which is the already mentioned fix-up outlays.

To achieve monthly estimates, an elaborate technique has been worked out for estimating the progress of construction. We do not have direct data on how much work is done on a house once started, on a factory after the contract is awarded, and so on. Statisticians in the field of construction have developed rule-of-thumb yardsticks for making estimates. But obviously these rule-of-thumb yardsticks are not infallible. In fact, at critical junctures in economic affairs, they are likely to be misleading.

For example, during a boom, when construction firms and contractors are extremely busy, they spread their work forces thin. The progress on specific projects is slow. But as construction activity slackens, more workmen can be employed per project and the materials-flow to sites is smoother. The work progresses more rapidly. The result is that the same number of housing starts or dollar volume of contracts can be completed more quickly.

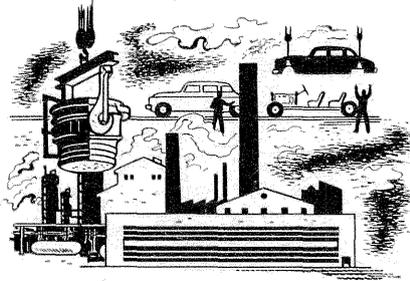
The Department of Commerce should take the lead in developing procedures for field collection of information which will substitute facts for judgment, opinion, and rule-of-thumb guesswork, looking toward the end product of a total estimate of monthly expenditures on construction on which we can rely.

Recommendations

See numbers 9 to 12, pages 6 to 7.

MANUFACTURES

The authorized 5-year census of manufactures is the foundation of the industrial statistics program of the Bureau of the Census.



With it is integrated the annual survey of manufactures, covering 45,000 of the 275,000 manufacturing plants in the country on a sample basis and serving as a bridge between the full censuses. Supplementing both are the current commodity reports for 63 industries, about half of which are on a monthly basis. The annual survey of manufactures and the current census industry reports, as well as the industrial production indexes prepared by the Board of Governors of the Federal Reserve System and other agencies, depend for accuracy and authenticity upon the benchmarks provided by the full census of manufactures.

Census of manufactures

Since 1810 the census of manufactures has provided the only comprehensive measure of the industrial growth and expansion of the United States. Its reports summarize quantities and values of manufactured products; employment; earnings; raw materials consumption; expenditures for plant and equipment; and other data. These

reports cover 450 separate industries classified by States and smaller areas, and show separately the production of several thousand important commodities.

Results of the census of manufactures are used, in many cases extensively, by almost all major economic groups in the Nation, including industry, trade unions, agriculture, distribution trades, service trades, transportation agencies, banks, investors, educational and research bodies, and Federal, State, and local governments.

Manufacturing is the chief source of our mobilization strength. Experience during both World War II and the Korean emergency has shown that accurate data on the size, scope, and location of our manufacturing industries are essential to mobilization planning.

Outside of population data, probably no other single group of census data has such a wide range of use and application. The bulk of the information provided by this census is not available from any other source.

The importance of maintaining the census of manufactures on a 5-year basis has been emphasized repeatedly by the important groups participating in this Committee's review. It is too late to conduct the census authorized for 1954 covering 1953 data. If one is not conducted before the next quinquennial year, we would have no accurate measure of industrial growth and change during the 11-year span from 1947 to 1958, a period of great industrial and economic change. In these years, industry, a major source of employment, has made a transition from World War II to a peacetime economy, moved again into a defense economy, and is currently making another peacetime adjustment. The industrial data in the census of 1947 are now so out of date that businessmen and other economic groups interested in manufacturing activity are severely handicapped.

The need for census data on manufacturing is particularly great at the present time with the growing responsibility placed on industry to provide employment and to serve an ever-growing population with an increasing standard of living. The time has long since passed when marketing planning can be done by hunch or rule of thumb. It requires facts that all groups may use with confidence.

The administrative efforts of the government will be handicapped without basic industrial statistics. Government has accepted the responsibility of seeking to protect its citizens from the worst ravages of business fluctuations. If we are to make progress in this direction, a growing insight and understanding of how our economy operates is necessary. Continuous study of problems dealing with changes in such factors as national income, production, employment, wages, and productivity requires complete and accurate statistics on manufacturing.

Considerable progress has been made in developing an understand-

ing of the forces governing our economy. Without the benchmark data provided by the census of manufactures on what is happening in our industrial system, however, we cannot hope to continue to gain knowledge of how to smooth out the peaks and valleys in production and employment. When we consider too that in the event of any mobilization for war, detailed statistics on manufacturing industries must be collected immediately to mobilize industry, it is clear that the government has a vital interest in a continuing statistical program to guide and direct the statistical operations of full mobilization.

A problem that merits special attention here occurs in certain areas of manufacturing activity, and is brought about as a result of the complex patterns of industrial production. With the multiplication of industrial processes, the invention of new materials and products, and the integration of industrial operations, the classification of many industrial establishments according to a single characteristic—in the census, usually principal end product—limits the significance of establishment statistics by failure to distinguish the importance of an operation according to each of its other characteristics. It is a fact that many of our establishments produce more than one product. Knowledge that a particular product is produced is not conclusive with respect to the manufacturing processes employed, i. e., the product could come from a completely integrated plant or from a mere assembly operation. By the same token, operators of manufacturing establishments have the alternatives of purchasing raw materials for further fabrication or purchasing manufactured components for subsequent assembly. Thus, the immediate consumers of materials are not necessarily identified by knowledge of the nature of the product produced.

In view of these circumstances, what can be done to make the census more useful for purposes of mobilization planning, and to provide more revealing data as to our complex industrial organization? Since it is not possible in many cases to infer from knowledge of the end product the nature of the processes employed or the materials consumed, and since these two aspects of industrial operations are of key importance, greater stress should be placed on the identification of processes and materials consumed in the basic census schedules. This would facilitate the use of the returns in mobilization activities and should permit the development of some useful statistical summaries supplementing those ordinarily provided by the census.

A more difficult problem arises out of the fact that many establishments produce two or more essentially dissimilar products, i. e., products that are primary to different industries. Such establishments are now classified only by the primary product in arriving at industry aggregates. Consequently, industry totals of general census data are overstated by the inclusion of products which are not primary to the industry in question. At the same time, they are understated with

respect to output which pertains to that industry but occurs as secondary output of other industries. In order to refine the industry data of the census, an attempt should be made to add, to the products section of the schedule, breakdowns of a few of the key general census data by secondary as well as primary product classes. In some cases, where two or more dissimilar products are turned out in significant volume and separate reports can be prepared for each product, it may be preferable to have plants report as two or more establishments, separating the activities associated with the two or more dissimilar products.

If this method of collecting and compiling census statistics were adopted, users of the data would have at their disposal more comprehensive and more meaningful industry data than before.

The Committee urges, therefore, that efforts be made by the Bureau as well as by other responsible governmental agencies in cooperation with industry to expand the presentation of census data by processes employed and materials used, and to bring about the necessary refinement in the presentation of general industry statistics in the manner discussed above. In the meantime, the Bureau should make it clear, in publishing data for areas where substantial activity may take place outside of the establishments producing a given product, that the data are applicable solely to the establishments primarily turning out the particular products, and should not be interpreted to include all of the activity which would, on the surface, appear to have been included.

Annual survey of manufactures

Beginning with 1949, the Bureau has carried forward such key measures as employment, capital expenditures, and output on a sample basis through its annual survey of manufactures. The annual survey attempts to keep up-to-date the major statistics of manufacturing activity and supplies a bridge between the complete censuses.

The annual survey has hitherto been conducted by the Bureau with extra-budgetary funds. In prior years these have come from the defense agencies, but the 1953 survey, to be conducted in 1954, is to be paid out of the "spot check" appropriations. There has never been a direct or specific Congressional appropriation to the Bureau for this purpose, nor has the survey been given recognition in this sense as a regular function of the Bureau. In spite of its precarious existence from year to year, the annual survey of manufactures has developed until it is now in effect a junior complete enumeration census for "large" companies (100-percent coverage of all single-unit companies with 250 or more employees; all multiunit companies with any establishment of 250 or more employees; all multiunit companies with aggregate employment of 1,000 or more), which account for approximately two-thirds of total manufacturing employment in the United States.

The Committee urges that the annual survey of manufactures be

included in the Bureau's budget as a regular function, except in those years in which a complete census of manufactures is undertaken.

Expansion and improvement of the annual survey should proceed in three directions. First, insofar as the areas of less than 100-percent coverage are concerned, the Bureau's sampling techniques should be tested and improved so that additional and finer breakdowns can be prepared from the sample schedules. Second, some additional areas should be covered by a 100-percent enumeration, especially in those industries which have significance in a war economy. The Committee understands that an expansion along these lines, involving the metalworking industries, has already been adopted for the 1953 survey, being conducted in 1954. Third, every effort should be made to expedite the compilation and publication of results.

Assuming that an expanded and improved annual survey will become a part of the regular functions of the Bureau, the Committee believes it can be a valuable supplement to the census of manufactures in providing facts for mobilization needs.

Current commodity reports or *Facts for Industry*

Current commodity reports, or *Facts for Industry*, are published for 63 industries, about half of these being on a monthly basis. There is a public as well as a private interest in the publication of current and reliable data on activity in key industries.

In the Hoover Commission *Task Force Report on Statistical Agencies*, it was recommended "That the cost of statistical services of primary benefit to special groups be shifted in part to these beneficiaries."

The Bureau of the Census, with the cooperation of the Office of Statistical Standards of the Bureau of the Budget, has made a serious effort in programming its current industrial statistics to follow this recommendation. It has reviewed from time to time the uses of industrial statistics with the aim of eliminating those not necessary in the public interest. Some surveys have been discontinued, the frequency of others reduced, and still other reports placed on a less costly basis. Some compilations are now being paid for by the industries of primary interest.

The problem of establishing the relative degrees of public and private interest is not an easy one. Unless there is some measure of public interest in the collection and dissemination of the figures, the use of Bureau resources for the purpose could not be justified; and the Committee is not aware of any instance in which such a criticism could be made. Typically, both a public interest and a private interest are served, as is true to some degree of all collection and dissemination of figures by the Federal Government. The Bureau has developed and applied working criteria aimed at dropping reports of doubtful public interest and at shifting the cost to the industry where the primary

interest is private. We believe that procedure is the only practical approach and that it should be continued.

Timeliness is of key importance in the collection and publication of figures on industrial activity. The extent of business use and usefulness of economic data covering a given month is roughly in direct proportion to the timeliness of the reports. There is at best considerable time involved in the collection of material from a large number of respondents, with further time for compilation and publication. The Bureau has shown an active interest in this problem and has made progress in a number of instances in shortening the time between the period covered and the issuance of the report. Perfection is not attainable, but we believe further progress can be made.

Mobilization statistics

Statistical preparedness is of primary importance to the Department of Commerce, and specifically to the Bureau. Both in World War II and during the Korean emergency, the Bureau was called upon to make extensive surveys for the defense and war agencies. In the event of another war or the sharpening of the threat of war, both the Congress and the public would expect the Department to have certain information available. If the recent pattern of industrial mobilization administration is repeated, parts of the Department, or agencies closely allied with it, would be the principal users of such information.

Industrial mobilization experience in 1940 and 1941, and again in 1950, made it clear that most of the industrial statistics developed and used in peacetime were inadequate for detailed mobilization planning. This experience emphasizes the responsibility of the Department and the Bureau to provide future administrators of industrial mobilization with the kinds of statistical information that will make it easier to bridge the initial period of organization without the loss of time and effort incurred in the past.

In analyzing the functions of the Bureau in the area of mobilization planning statistics, a distinction must be made between the adaptation of traditional census statistics and reporting procedures to mobilization needs and the preparation or conduct of surveys designed only or primarily for these purposes.

In agreement with the Panel on Mobilization Statistics reporting to this Committee, we do not support the proposition of superimposing in peacetime upon the Bureau and upon its respondents the burdens of an elaborate statistical reporting system geared to some assumed concept of an industry mobilization or materials control program. Similarly, we do not favor in peacetime any statistical undertaking of the nature of a recurrent general mobilization survey.

In the main, we view peacetime census data, transcribed from schedules to punch cards or electronic tape, as a stock of information that

can be sifted, sorted, or tabulated in different ways to yield to possible future mobilization authorities useful guide posts as well as classified mailing lists for narrowing down the area of actual mobilization surveys.

We see one of the main benefits of census data for mobilization purposes in the possibility of narrowing the focus of those special surveys that cannot be anticipated but must be conceived and designed as the need for them becomes apparent with more intensive mobilization planning or actually arises with full mobilization. In the meanwhile, the material allocation and facilities-use features of mobilization plans must be worked out by the Office of Defense Mobilization and the Business and Defense Services Administration in cooperation with the industries concerned. Special surveys must at the least await the formulation and acceptance of a plan of mobilization.

We believe that for mobilization planning purposes the emphasis of the Bureau work in peacetime should be upon the preparation of adequate industrial data for general use, rather than maintenance of continuous statistical series expressly designed for mobilization purposes.

With respect to the census of manufactures, we believe that a five-year period represents about the longest permissible interval for obtaining bench-mark data needed in mobilization and defense planning. We regard the failure to provide funds for the 1953 census as false economy, capable of producing serious consequences to national preparedness; and we urge that a comprehensive census of manufactures be conducted covering the year 1954. Because of the close functional tie-in of mining and manufacturing operations in a defense or war economy, the census of mineral industries should be taken at the same time as the census of manufactures.

In this mobilization setting also, we call attention to the need for cross-classification of census of manufactures industry statistics by processes employed and materials consumed as well as by products produced, as stated elsewhere in this section. Without these cross-classifications, census of manufactures data cannot make their fullest contribution to mobilization planning.

The adaptation of both census and annual survey data to mobilization needs should include a more comprehensive schedule of materials consumption; an expanded schedule of industrial operations extending over a larger area of respondents than in the past; breakdowns where practicable of the principal census data by primary as well as important secondary product classes; a reexamination of the geographic codes to permit the expeditious realignment of geographic industry patterns in the event of enemy action against this country; the planning of decentralized operations of the Bureau; and close liaison with trade

organizations capable of providing supplemental information to the Bureau.

In the past, the Bureau schedules for its monthly, quarterly, or annual *Facts for Industry* series have proven very useful as the nucleus of the statistical requirements of the mobilization agencies. These *Facts for Industry* reports should be continued and strengthened.

Recommendations

See numbers 13 to 19, page 8.

MINERAL INDUSTRIES

Facts on the mineral industries are collected and disseminated by two primary governmental agencies—the Bureau of Mines of the Department of the Interior and the Bureau of the Census of the Department of Commerce. The Bureau of Mines has continued throughout the years making available regular monthly and annual commodity



figures concerning the minerals segment of our economy, with primary emphasis on physical output. These figures are of value to the industries served and are a service to the economy.

The last census of mineral industries was taken for 1939. Public Law 671 (80th Congress) provided for a census of mineral industries to be conducted for 1948 and every five years thereafter. The Congress provided preparatory funds for the 1948 census and again for the 1953 census. Appropriations for actually taking these censuses, however, were not provided.

The census of mineral industries includes comprehensive data on the value of products of mineral industries, the industrial and geographic structure of mining, the cost of developing and operating mineral properties, and labor, materials, and capital requirements for mineral operations. Because no census of minerals has been taken since 1939, there is no complete-coverage benchmark to tie in the output of mineral industries with the current measures of industrial production, national income, employment, wages, hours, and related economic measures by the Federal Government and private organizations.

There has been a growing dependence in recent years on foreign sources for minerals. Knowledge of the domestic locations, extraction volumes, and production costs of strategic minerals is essential for defense purposes. This knowledge is essential for sound management during peacetime as well. Public information on costs is vital in the formulation of public policies and in providing guides for the industries concerned.

The President's Materials Policy Commission, after an extended study of our mineral resources, recommended in 1952 ". . . that a complete census of mineral industries, already authorized by law, definitely be taken in 1954 and every five years thereafter." In 1949, the National Petroleum Council unanimously recommended that a census of mineral industries be conducted. The National Coal Association has expressed itself as being in favor of a census but would prefer that the material be more along market lines.

The Congress not having provided funds for the census authorized to be conducted in 1954 on 1953 data, it would now be impracticable to conduct that census adequately, even if supplemental funds were appropriated early in 1954. Under the circumstances, it appears that an adequate census of mineral industries could not be conducted before the early part of 1955 on 1954 data. The authorized census year having passed, new authority as well as funds should be requested.

This Committee believes that a full census of mineral industries conducted once in 10 years would be adequate provided that a short-schedule sample census be conducted at the mid-point of the 10-year period. The sampling basis should be sufficient to yield reliable State estimates. Such a program, supplemented by the annual data gathered by the Bureau of Mines would, we believe, result in a reduction of census costs in this field of about 25 percent, compared with the present authorized program of a full census every five years.

The census of mineral industries authorized for 1953 was planned on a cooperative basis by the Bureau of the Census and the Bureau of Mines, under which the minerals specialists of the Bureau of Mines and the Bureau of the Census personnel worked in close collaboration. It was planned to be conducted on a similar cooperative basis. A single schedule for each respondent was to serve the purposes of both agencies for the census year, relieving the respondent of a double reporting burden and eliminating duplication of governmental activity. The Committee urges that this cooperative planning and joint conduct program be continued for the recommended censuses.

Recommendations

See numbers 20 to 22, page 9.

BUSINESS

Census of business

The first complete census of business in this country covered the year 1929. Censuses were also taken for the years 1933, 1935, 1939, and 1948. Funds were not provided for the quinquennial census of business authorized to be conducted in 1954 on 1953 data.

The 1948 census of business covered almost 3,000,000 establishments, made up of approximately 1,750,000 retail establishments, some 250,000 wholesale concerns, and almost 700,000 service establishments. Together these contribute about 20 percent of national income.



The 1948 reporting forms were especially designed for each type of business. In common, however, they provided data on kind of business, type of operation, and legal form of organization; number, size, and location of establishments; single and multi-unit type; volume of receipts, in total and in various commodity or merchandise lines; number of proprietors and of unpaid family workers; employment and payrolls; credit sales; accounts receivable; and inventories.

The census findings on number of establishments, classified by kind of business, volume of sales, and employment and payroll were published for all cities and towns of 2,500 or more inhabitants, as well as counties, States, regions, and the Nation. Data on such items as inventories, merchandise lines, receivables, etc., were published generally for the Nation as a whole and for geographic divisions, and in selected instances for States.

Current statistics

Supplementing the complete censuses, the Bureau conducts three current surveys in the field of distribution, the results appearing in the *Monthly Retail Trade Report*, the *Monthly Wholesale Trade Report*, and the *Canned Foods Report*.

The retail survey, based on monthly reports from all large multi-unit organizations and from other large establishments and a rotating sample of other retail establishments, provides monthly estimates of the volume of sales in the United States for some 30 kinds of business. In addition, it provides estimates of the trends of retail trade

for major kinds of business in selected metropolitan areas and trends of all trades combined, excluding the large multi-unit organizations, in these areas. Recently, a series of advance estimates of retail trade was started, issued 10 days after the end of the month covered, providing data on total retail sales volume and separately for about a dozen major business groups.

For wholesale trade, the sampling basis now being put into effect provides for monthly estimates of the dollar volume of sales and end-of-month inventories for about 35 important trades. Monthly trend estimates are provided for a number of these trades, by geographic divisions, and for an additional group of trades, nationally.

Estimates of canned food stocks held by wholesale distributors are published five times yearly for 17 important canned foods. In two of these report periods, data also are collected for 17 additional food items. These data, along with figures on canners' production, carry-over, and shipments, provide information on supply and movements of canned foods.

The present current program on retail and wholesale trade aims primarily at a monthly estimate of total national figures for important kinds of business. Local area data are provided for only a few principal areas.

County Business Patterns

The Bureau of the Census and the Bureau of Old-Age and Survivors Insurance have cooperated in the preparation of *County Business Patterns*. This publication presents statistics tabulated from wage reports filed by employers in the Old-Age and Survivors Insurance program. The preparation of these reports for administrative purposes makes it possible to provide, at very small cost, useful industrial and business statistics by counties. The most recent publication presents statistics on mid-March employment, first quarter 1951 taxable payrolls, and reporting units by employee-size classes for almost all industries in the Standard Industrial Classification system. Statistics are shown for 175 industry groups for the United States, for each State, and for 426 selected large counties. For the remaining counties, statistics are shown for ten broad industry divisions.

The quality of the final tables is significantly improved by the use of census industry codes and establishment distributions of many large multi-unit companies. This program is of great value for marketing planning because it provides a large amount of county-industry data. It does not contain data for cities, towns, or other parts of counties; it does not include statistics for establishments with no employees; and the statistical measures are limited to number of employees and payrolls, with no information on sales volume.

County Business Patterns was issued annually for the years 1946-

51, but it is now on a biennial basis, to cover the odd years, beginning with 1953.

Use of administrative records

The development of the Social Security System and the extension of the income tax to include practically all businesses have provided an opportunity to experiment with a major change in the method of conducting the business census.

Under the present tax laws, all businesses file one or more tax returns with the Federal Government. The most comprehensive return, that relating to income tax, is filed by all businesses. Another, the employer's return under the Federal Insurance Contributions Act, affects all employers, or about two-thirds of all business concerns. Both of these returns contain some information similar in definition and concept to that collected by the Bureau of the Census. Recent developments suggest that, with the cooperation of the administrative agencies, access can be had to the relevant data on the tax returns for statistical purposes. To the extent that such data can be substituted for information directly collected, the burden of reporting and the cost of collection by the Bureau are reduced.

Where the tax data cannot be directly substituted for census data, because the full information required is not provided, the records of the administrative agencies can be used in the development of appropriate mailing lists. It appears that the savings would be substantial, but there are problems to be solved before these savings can be accomplished.

The kind of data found on the tax returns is particularly well adapted to serve the needs of those concerned with statistics for counties, cities, and towns. The tax form has possibilities of supplying data on sales or receipts classified by kind of business and geographic location. Such small area data are ordinarily published only in a complete census and are the most costly statistical compilations because they have in the past required a field canvas of business establishments. The substitution of tax information for direct collection appears to offer a likely method of introducing major savings in the cost of a complete census. These returns also offer possibilities for other types of publications in which the primary interest is in national aggregates.

It will be understood that this use by the Bureau of the Census of income tax and social security records can be only a one-way flow. The disclosure rule and law effectively prevent—as they should—any access to census records by tax or law-enforcement agencies.

Uses of business statistics

As part of the Committee's consideration of census programs, a comprehensive survey of uses of business statistics was made by the

American Marketing Association. A smaller survey of a group of prominent industry representatives, who have had considerable experience with business statistics, was also carried out by the Panel on Wholesale, Retail, and Service Trades. Both these surveys indicate that the census of business is used substantially by many business concerns. It is clear from these reports that information produced in the census of business is necessary to the efficient management of distribution.

The business censuses reveal the scope and extent of the potential market and enable the business man to plan his distributive facilities, locate his outlets in such a pattern as best to serve the market, adjust his advertising and sales solicitation to market area potentials, control his financing and credit policies most efficiently, and gear his production rate to the variation of inventory requirements.

Following are some of the important uses of census of business statistics which are specified in the surveys referred to:

1. Measuring market potentials.
2. Allocating outlets, salesmen, advertising expenditures, etc., to markets.
3. Determining routing schedules for salesmen, individual salesmen's territories and quotas, and expense budgets.
4. Determining the location of new stores, shopping centers, warehouses, and manufacturing plants.
5. Helping to determine manufacturing schedules and proper inventory in relation to the size of markets.
6. Providing guidance to small manufacturers, wholesalers, and retailers.
7. Determining and measuring new trends in distribution.
8. Forecasting sales trends, market potentials, and changes in distribution channels.
9. Selecting areas for test campaigns and making budget allocations for such programs.
10. Providing data needed in planning marketing surveys.
11. Providing the raw materials for special industry or area reports by magazines, trade associations, development agencies, and the like.

Recommendations

See numbers 23 to 28, pages 10 to 11.

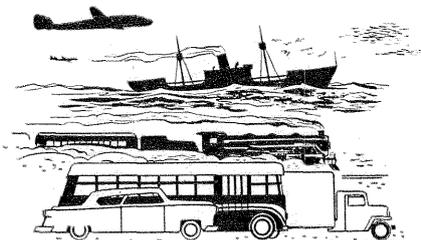
TRANSPORTATION

Transportation is one of the most changing sectors of the national economy and taken as a whole represents the greatest combination of economic activity in the country. Motor vehicles, railroads, shipping, pipelines, and air transport facilities, and the resources that maintain them, are of high significance in the Nation's total economic activity.

Federal, State, and local governments must continually make legislative, regulatory, or promotional decisions that not only bear directly on the interests of the carriers, but affect indirectly the competitive position of producers and distributors, the location of economic activities, the geographic flow of goods and passengers, and the general welfare of wide areas of the Nation. Aside from normal peacetime considerations, transportation is a key factor in defense.

A great volume of statistics is collected for and by the industry and used both in its management and in its regulation. Still there are some serious gaps. Some of these exist because no agency has the authority or the means to collect the data, and some exist because a feasible method for their collection has been wanting.

Public Law 671 (80th Congress) authorized a census of transportation, and therefore the presumption has existed that such a census was needed to clarify the transportation statistics picture. Under this



legislative directive, the Bureau of the Census has developed a program for bridging certain statistical gaps. The program relates primarily to (a) information on the ownership, characteristics, and use of motor trucks not covered by the regulatory authority and records of the Interstate Commerce Commission, and (b) measurement of the relative traffic flow by the several competing modes of transportation, in total and for the major classes of commodities.

In the absence of any previous census of transportation to serve as a model or target for comment, highlights of the proposed program for the 1953 census of transportation were sent by the Panel on Transportation for comment to 77 informed persons directly concerned with data in the several fields of transportation. A careful study of the responses indicates the following:

1. The majority of the respondents believe the proposed program would produce desirable data.
2. In only a few instances is a strong case made for the essentiality of the proposed data.
3. There are wide variations of opinion on precisely what kinds of data are most needed.
4. A significant number of the respondents entertain serious doubts as to the feasibility of the proposed measurement of traffic flow.

5. Some of the respondents believe the census program in transportation should be broader.

The Committee recognizes the broad and intense interest in more and better data on transportation, but does not find sufficient evidence of feasibility, essential need, or fruitful usage to justify a recommendation that the proposed census of transportation be carried out.

We are concerned particularly with the expressed doubts as to feasibility. Although considerable experimental work and planning have already been done by the transportation division of the Bureau of the Census in measuring traffic flow by ingenious techniques of sampling, including the analysis of shipping documents and the keeping of logs by truck operators, the feasibility of these techniques to produce reliable and broad-scale data of a census type remains to be proven. It is the view of this Committee that this experimental testing of these techniques should be continued.

To conduct a census program on an inventory of trucking alone seems to this Committee to impose on the Bureau of the Census a program too narrowly limited to justify its existence as a census program. A more desirable arrangement would be to have a Federal agency with a major interest in trucking, such as the Bureau of Public Roads, or the Interstate Commerce Commission, sponsor such an inventory to be carried out by the Bureau of the Census or by such other means as it would designate. It is possible that administrative documents, such as truck registrations, could be utilized at least in part to produce the missing truck data.

Recommendations

See numbers 29 to 31, page 11.

FOREIGN TRADE

Statistics on the foreign trade of the United States have been compiled by the Federal Government since 1790. This program shares with the population census the distinction of oldest age.

Uses

Both legislative enactment and administration of tariff rates, rules, and regulations being dependent on records, governmental collection and publication of the facts of foreign trade are traditional functions of governments everywhere. It has been traditional also for all free governments to foster and promote the export trade of their citizens. Added to these uses of foreign trade figures are the newer needs relating to export controls, foreign investments, quotas, peril points, escape clauses, stockpiling, foreign aid, shipping subsidies, and import policies.

In the aggregate these governmental needs alone dictate a huge program of collection and publication of foreign trade statistics. These

figures supply the factual basis for planning the country's trade policy. Buttressing the governmental requirements are the manifold needs of all those who engage in importing and exporting or whose activities and interests require knowledge of foreign trade. The Bureau of the Census performs an essential function in meeting these public and private needs. Both public business and private business are dependent on accurate and timely reporting of the facts of our foreign trade.

Attrition and erosion

Despite recognition of the government's traditional role in this field and despite the vital need met by these figures, the Bureau's foreign trade statistics program has been subjected to continual attrition and erosion over the past eight years, and a condition approaching crisis has been reached. One phase of the program after another has had to be jettisoned, and other cost-saving expedients have had to be resorted to, which seriously lessen the value of the results. For example, *Foreign Commerce and Navigation of the United States*, the record of the country's foreign trade, published annually almost from the beginning of the Nation, was last published for 1946; publication of the related historic *Monthly Summary of Foreign Commerce* was suspended in April 1951; some of the special monthly reports have had to be published in such form as to lose legibility without use of a reading glass; and some of the customs records have had to be compiled on such a small sampling basis as to limit the usefulness of the results for many users.

These postwar retrenchment programs have forced the Bureau continually to cut its program to fit its funds. Efforts have been made to meet the insistent and mounting demands upon it by both governmental agencies and private users, in the face of increasing price and wage levels and workload over the past eight years without corresponding increases in appropriations. For example, funds allotted to the foreign trade programs for each of the past several years have been lower than for 1946; and when the 1946 level is adjusted to present salary levels, the decline is about one-third. On the other hand, the workload has perhaps doubled. The consequences have spelled successive abandonment of programs and successive lowering of standards of quality and comprehensiveness, despite gains in efficiency in tabulating methods and equipment.

The problem

The basic problem is presented by the insistent demand from users for foreign trade figures in great detail, by specific products or classes of products and by individual countries of origin or destination. This applies both to Government agencies and private users. The need is understandable in both cases. Tariff legislation is generally by narrow classifications. Administrative action with respect to peril

points, escape clauses, valuation, cost investigation, and the like must concern specific products and classes of products. The exporter is not engaged in "general business" and is not seeking markets for broad classes of products or in broad regions or groups of countries. He is more usually seeking a market for a particular product and in a particular country. Similarly for the importer. Apart from analysis of economic trends and broad shifts, many if not most private users need the detailed figures.

A related difficulty is that foreign trade statistics are compiled from documents that are designed and required both for statistical and other purposes. Furthermore, a document must be filed with Collectors of Customs by importers and exporters for each foreign trade transaction. There is, therefore, no opportunity to save compiling costs of the Bureau of the Census by sampling respondents or by asking respondents for reports on their combined transactions for a month or any other period of time.

The Panel on Foreign Trade which reported to this Committee has proposed a possible solution for consideration. It is that only those broader categories or groupings of products and commodity figures that are required for public policy and measurement of economic trends and shifts be tabulated and published; and that the foreign trade figures by specific products and narrow classes of products be made available to users only on a fee basis adequate to cover the supplemental costs. As the Panel points out, however, the need for detailed figures by other governmental agencies, such as the United States Tariff Commission, might so lessen the savings of the Government as a whole as scarcely to justify the curtailment of the published detail.

Written responses to the Committee and statements made before the Committee lead us to doubt the feasibility of this proposal. It is clear, in particular, that peril point and escape clause investigations by the Tariff Commission would be severely handicapped by failure to tabulate the figures in the detail specified or implied in tariff legislation and in trade agreements. In fact, if the Bureau cannot furnish such information, the Tariff Commission would be under the necessity of obtaining the required figures by canvassing producers, exporters, and importers. We do not believe that any such abdication by default of the Bureau's statutory responsibility in this field should be permitted.

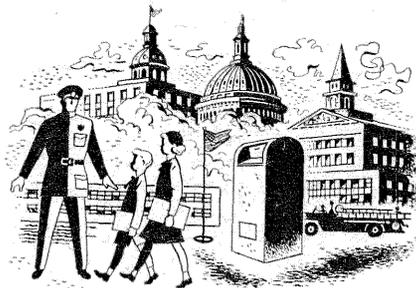
Recommendations

See numbers 32 to 35, page 12.

GOVERNMENTS

The Bureau of the Census is the primary source for figures on governments in the United States, through a program that has been car-

ried on since 1850. The program brings together statistics concerning the Federal Government, the 48 State governments, and approximately 115,000 local governmental units to provide information on taxation and other governmental revenues, governmental costs, debt, employment, and other subjects. The collection and publication of such information are vital for sound governmental policies affecting intergovernmental relations, State and local finances, public employment, and to provide a basis for allocating funds among the States and within the States to subordinate units. Local governments and private business, particularly in the finance and invest-



ment fields, find these facts indispensable in evaluating the credit standing of particular governments and to keep abreast of developments in State and local taxation and other financial trends. Wide use also is made of these data in education and research.

Federal Government statistics are readily available, but with States and local governments spending some \$30,000,000,000 annually and having a similar total of outstanding debt, we also need reliable, recurrent figures on the financial operations and trends of these important components of our governmental system.

A study of the proper allocation of fiscal and functional responsibility among Federal, State, and local governments is now being made by the Commission on Intergovernmental Relations, which may add a new element of essentiality for such facts if the State and local governments take over a greater proportion of the total governmental load. The magnitude of the road construction program and other delayed governmental building that must be undertaken in the future emphasizes the importance of timeliness and regularity in information made available to those faced with the responsibility of decision and financing.

The 1950 statute relating to the census of governments (Public Law 767, 81st Congress) directed the Secretary of Commerce to conduct a census of governments to supply data on revenues, expenditures, debt, employment, and other related topics for all State and local governments for 1952 and every fifth year thereafter. Funds

for this purpose were not approved by the Congress in either the 1952 or 1953 budgets.

This Committee does not see how intelligent government at all levels is possible in the absence of such vital facts. We believe, however, that a better balanced program can be outlined for a decade than that now authorized in the quinquennial complete censuses. Sampling techniques in intercensal periods have proved very effective in the study of governmental data. Properly employed, these procedures can yield great value per dollar expended.

The program recommended, for which new legislation would be required, would provide more adequate and more timely information than that contemplated in the presently authorized quinquennial censuses. It would result in an economy over the authorized program of about \$1,000,000 for the decade.

Recommendations

See numbers 36 to 38, page 13.

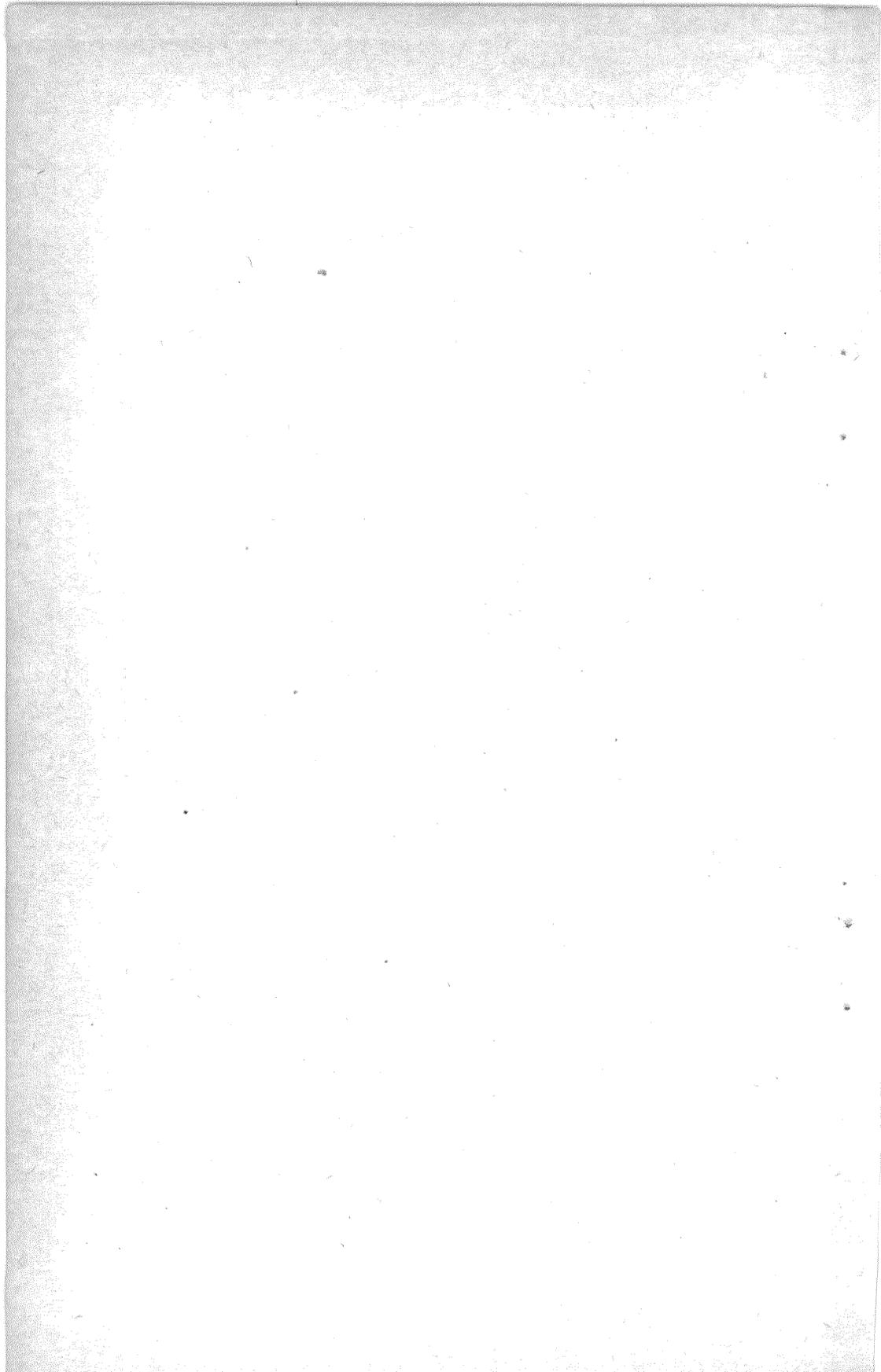
RELIGIOUS BODIES

Information on the religious bodies of the country has been collected every decade beginning in the 1880's. Since the turn of the century a complete census has been taken covering the years ending in 6. The latest of these was initiated with an appropriation of \$146,000 for the fiscal year 1946. This sum was sufficient for the preparatory work and the designing and mailing of questionnaires. An additional sum of \$463,000 for the succeeding fiscal year was requested by the Bureau for processing and tabulating the results, but this was denied by the Congress. As a result, the replies received, representing about two-thirds of the estimated total, were not tabulated, and no report was published.

The most recent completed census of religious bodies covers the year 1936. It was based exclusively on replies from religious organizations rather than from their members, and the definition of membership is that of each reporting body. The published volumes show the reported number of churches, membership by sex and age, and information on edifices, expenditures, and other items, by denomination and by States and major cities.

The Intensive Review Committee did not initiate any inquiries on the use of or need for a census of religious bodies. One specific plea for such a census program was submitted to the Committee, by the Association of Statisticians of American Religious Bodies. The Association's statement is included in the Exhibits published by the Committee. Since the Committee has made no investigation of this area, it does not feel qualified to offer recommendations.

It is estimated by the Bureau that a census of religious bodies, if taken for 1956, would cost in the neighborhood of \$1,250,000.



PART III.—STATISTICAL PROGRAMS IN A FREE SOCIETY

The key to the successful functioning of any human institution is good management, whether that institution is public or private, international or national, State or local, a giant business corporation or a one-man retail shop, a big farm or a little farm, an association or an individual, a group or a family.

GOOD MANAGEMENT AND GOOD RECORDS

All good management is dependent on good records, on accurate, timely, and relevant information. These records are of two general sorts, internal records and external records. Good internal accounting records are essential in the evaluation of present and past policies and programs and as guides to future courses of action. Essential in a similar manner are good external records or statistics—on the markets served and on the markets from which are secured materials, equipment, labor, and capital—in short, accurate, timely, and relevant information on the condition and trends of the economy and particularly that part of the economy of more intimate concern to the organization in question.

MYRIAD OF DECISIONS

Both the level and the direction of change of the American continental economy at any time are the resultant of the forces set in motion by the myriad of decisions made by the more than 4 million American business concerns; by the 5 million farmers; by the 5 million professional, technical, and kindred workers; by the thousands of public officials who man our approximately 115,000 local, State, and Federal agencies of government; by the more than 60 million persons who make up our labor force and the hundreds of labor organizations; and by the 161 million consumers and their 41 million families whose needs our economy must meet.

Decisions there must be—innumerable ones every day and every hour—in the functioning of our economy and in the functioning of our many-sided society. Every one of these decisions must be based on information—good or bad. In the main, they can be no better than the information on which they are based.

STATISTICAL NEEDS OF A FREE SOCIETY

A free society is dominated by individual motivations and actions. Freedom of choice is its hallmark: Freedom of choice of occupation and career; freedom of entry in business; freedom to buy or not to buy and

Part
freedom as to what to buy; freedom in the management of our far-flung business system; and all the other freedoms of choice that mark our liberties.

These very freedoms impose on us the necessity for widespread information. As a free society we are dependent for our well-being and growth on the result of these individual motivations and actions. They must be informed motivations and actions if their result is to promote the general welfare.

Free governments have long recognized the obligation to collect and publish facts and figures on their populations, resources, economies, and the welfare of their citizens. The record of our own country in the discharge of this responsibility of government has been a notable one.

No similar responsibility is recognized by totalitarian regimes, for theirs are State-dominated societies. Under their regimes, individual motivations are given no sway, and individual actions must conform to a State-determined pattern. Where freedom of choice cannot exist, there is no case for dissemination of information.

Many observers have commented on the strong reliance on statistics in the American economy—the tendency to measure; to describe in numbers; to analyze numeric relationships; to seek statistical indicators of change, shifts, and trends; and to search out statistical measures of emerging problems as a foundation for remedial action and policy programs. These tendencies reflect the imprint of science and the conviction that man, by rational choice, can shape his destiny.

Even among the free peoples of the world, our economy is peculiar in its dependence on facts and figures, because ours is a competitive economy. Both the interdictions of law and our business and national traditions impose on each enterprise and each citizen the responsibility of choice and decision; and impose also prohibitions against concerted action in restraint of trade or in restraint of the liberties of others. As a corollary, the responsibility of government to collect and disseminate information is correspondingly greater.

(The public sector of our society is highly diverse and in a sense highly competitive, with its separation of powers and responsibilities among Federal, State, and local governments. There is both competition and emulation between Federal and State agencies, competition and emulation among the States, and competition and emulation among local agencies of government. By virtue of this separation of governmental powers and this dependence on diversity and competition and emulation, a correspondingly greater responsibility for dissemination of information rests on the Federal Government.)

“ . . . from reflection or choice . . . ”

Alexander Hamilton, in *The Federalist*, No. I, voiced the far-seeing vision and faith of the founders of our country when he spoke of

“. . . the fate of an empire in many respects the most interesting in the world” and noted that, “it has been frequently remarked that it seems to have been reserved to the people of this country, by their conduct and example, to decide the important question, whether societies of men are really capable or not of establishing good government from reflection or choice, or whether they are forever destined to depend for their political constitutions on accident and force.” Hamilton and his associates were addressing themselves to the question of adoption of the Constitution, but his profound words written in 1787 are equally applicable to the functioning of our society today.

CENSUS BEGINNINGS

Article I, section 2, of the Constitution established the beginnings of the Federal Government’s statistical program in providing that “Representatives and direct taxes shall be apportioned among the several states . . . according to their respective numbers . . .” (modified, with respect to income taxes, by the 16th Amendment) and that “the actual enumeration shall be made within three years after the first meeting of the Congress of the United States, and within every subsequent term of ten years, in such manner as they shall by law direct.” Section 9 of the same article refers to “the *census* or enumeration herein before directed to be taken.”

Although the beginnings of the government’s statistical program were established “from reflection or choice,” the present extensive statistical programs of the Federal Government, including the programs of the Bureau of the Census, owe much of their inception and development to the statistical needs forced upon us by the mobilization requirements of World War I, by the economic and social requirements imposed by the Great Depression of 1929–33, and by the mobilization requirements of World War II.

With specific reference to the Bureau, the carefully planned, re-scheduled, and staggered program of authorized economic censuses, provided for by the 80th Congress in 1948, has been buffeted about and seriously damaged by budgetary “accident and force.”

It has been the aim of the Intensive Review Committee to try to learn “from reflection or choice,” in consultation with principal and informed users of census materials, how well those programs and related census work have been carried out, what uses they have served, and what changes and improvements should be made to bring this phase of government in line with the needs of our present-day society.

DYNAMIC ECONOMY

In assessing the informational needs of our society today, it is well to remember that it is in unprecedented degree a changing and highly mobile society. The dynamism that impels American life has brought

not only a very high level of production and consumption and well-being, relative to our proportion of the world's land area and population; it has brought also a degree of constant change that no other society has known. Our population is on the move, and wherever new opportunities open up anywhere over our continental expanse, there people are drawn.

POPULATION UPSURGE

Since 1940 we have added about 30 million people to our population, and most of this increase has come from the excess of births over deaths, i. e., the natural increase. The increase since the census count was taken in April 1950 is about 10 million; and in the year 1953 alone the increase was $2\frac{3}{4}$ million, the net result of almost 4 million births, about $1\frac{1}{2}$ million deaths, and net in-migration of about 200 thousand.

This rapid population increase can be dramatized in its market or demand meaning by noting that we are adding every year the ultimate equivalent of a Florida, Iowa, or Louisiana; or a Chicago metropolitan area every second year; or a New York City, an Ohio, or a Texas about every third year; or that between now and 1960 we will probably add the equivalent of a New York State or the three Pacific Coast States of California, Oregon, and Washington.

The age distribution of the population is changing in significant ways, as shown in census reports and projections.

By 1960, there will probably be a total population gain of about 16 million, of which only about 4 million will take place in the 20-to-64-years-of-age group—the active working years—compared with about 10 million in the under-20 group and about 2 million in the 65-and-over group.

In absolute figures, we will probably have in 1960 about 66 million persons under 20 years of age, compared with 56 million in 1953; about $94\frac{1}{2}$ million in the active working age groups from 20 to 64, compared with 90 million at present; and about $15\frac{1}{2}$ million over 65 years of age, compared with $13\frac{1}{2}$ million now.

With the economic growth in prospect over the next 7 years, it does not require much imagination to interpret these figures in terms of changes in demand for labor; rising wage rates; increasing pressure toward mechanization and adoption of labor-saving devices; a great influx of students into the schools and universities; marked rise in the demand for goods and services for those under 20; an increased pension load on the economy; and so on.

As for the 75-years-and-older group, we now have about 4 million, and will probably have about $5\frac{1}{2}$ million by 1960. By 1975 this group will probably have grown to about $7\frac{1}{2}$ million, out of the then total of about $20\frac{1}{2}$ million aged 65 or older. It seems likely that the trend

will be toward more employment of "oldsters" and toward later retirement.

By 1960 the total population of the country will probably exceed 175 million. And by 1975 the prospects are that our population will exceed 200 million and perhaps by a considerable margin. In fact, we may attain 200 million by 1970.

There is no more eloquent evidence of the buoyant faith in the future held by the American people.

TECHNOLOGICAL REVOLUTION

Great new industries have grown up over the span of a few years. New industrial and commercial areas have been built up over the past decade in what was formerly farm land and pasture. Old industries have revolutionized their processes to the point of becoming new industries. New methods of distribution have opened up new vistas in commerce. In our economy of today, nothing is taken for granted—except the inevitability of change.

In part we are witnessing the manifestations of a vast technological revolution. The tremendous advances of science, technology, and management over the past 21½ decades are being put into industrial application in ever-widening waves of innovation. It is a process that feeds on itself, each scientific and technological and managerial advance paving the way for further innovation. And our competitive society puts a premium on such advances, with the competitive pressure to lower costs, to widen markets, and to produce a better product.

The implications may be more far-reaching than those of the original industrial revolution. The frontiers are being pushed far out, and we have only glimpses of what constructive utilization of atomic energy may mean.

As one indication of the significance of this technological revolution, it may be noted that American industry has invested in new plant and equipment since the end of World War II the prodigious total of \$180 billion. Such expenditures in 1953 alone amounted to about \$28 billion. Here again is eloquent evidence of a buoyant faith in the future of our country.

TRANSFORMATION OF THE ECONOMY

Parallel with and necessary to the industrial transformation that we have seen, we have wrought epochal transformations in the American economy in the direction of both more equitable functioning and more effective functioning. The average level of well-being is well known, and numerous studies have revealed that more people proportionately share in this well-being than ever before.

As a part of this transformation in our economy, we have developed more skilled management, more sensitive to change and more alert to

the need for corrective action. No close observer of the American economy can fail to be impressed with this sensitivity to change in its portents for future growth and development; and with this alertness to the need for corrective action in the interests of stability. Both growth and stability are clearly seen as the goals toward which skilled management is driven in our free and competitive economy.

Finally, we have achieved a transformation in our thinking, under which all major groups in our population now take it for granted that government, in cooperation with its citizens, must and will combat serious business declines with all the powerful weapons at its command. That is, indeed, a revolution in our thinking. We no longer regard major business depressions as inevitable or as God-ordained. Rather, we recognize them as man-made, as evidence of poor management, public and private. It is no longer a political issue, both major political parties being committed over and over again to doing whatever might be necessary to maintain reasonable economic stability and growth.

SUMMING UP

1. We are experiencing a great upsurge in population growth and major shifts in the age composition of the population. These carry large meaning and implications for public agencies—Federal, State, and local—and for all private elements in our society; and notably for the free economy that must meet the mounting needs of this rapidly growing and changing population.

2. We are in the midst of a great technological revolution which is accelerating change, hastening obsolescence, creating new industries and transforming old ones, remaking the industrial map of the country, and bringing within the range of the feasible great heights of production, productivity, and well-being.

3. We have brought about a transformation in our economy under which both a growing sense of social responsibility and our competitive system impel management toward the twin goals of reasonable economic stability and growth.

4. We have achieved a transformation in our thinking under which all major elements in our population now take it for granted that government, in cooperation with its citizens, must when necessary employ the powerful weapons at its command to assist in maintaining reasonable economic stability and growth.

What is the meaning of this recapitulation in terms of a review of census programs? It is this: The need for the benchmark statistics provided by the Bureau of the Census is greater today than ever before and promises to grow in intensity.

FORWARD LOOK

As the first Hoover Commission's *Task Force Report on Statistical Agencies* pointed out in 1949, "the character of the contribution made by statistics to government and to private administration has been profoundly modified within the last quarter century," the emphasis shifting "to current affairs and to proposed future operations and their consequences . . . statistics collected and analyzed with reference to decisions that must be made, controls that must be exercised, judgments that entail action."

This Committee endorses that appraisal and expresses the belief that it may be applied specifically to the statistical programs of the Bureau of the Census.

The fact-gathering program of the Bureau is not one of assembling statistics for statistics' sake. Rather, it is a purposive program authorized by the Congress for the periodic measurement of the condition of the country. These measures serve in themselves as a basis for innumerable decisions and actions, throughout our national life, ranging from reapportionment of representation in the House of Representatives to the setting of a sales quota for a county or neighborhood by a business concern. Census measures serve also as the foundation for the great structure of current economic indicators maintained by Federal, State, and local governmental agencies and by non-governmental institutions and agencies and business concerns and organizations. These economic indicators in turn serve as indispensable guides to action by all agencies of government and by the many millions of separate units composing our society, and not least by our 4 million business concerns.

ECONOMIC INDICATORS

The benchmark census records are essential to current and prospective action programs. Without them, it would not be possible to measure and interpret current changes; nor would it be possible to analyze the probable consequences of proposed actions. Our comprehensive system of current indicators of the condition and trends of the economy, based on relatively low-cost sampling studies and representative indexes, rests largely on census enumerations. Without that foundation we would have no basis for confidence in the assignment of weights in these sample studies and indexes, and no basis for adjusting these indexes from time to time to bring them into accord with known totals for the economy.

GROSS NATIONAL PRODUCT

The single most comprehensive economic measure we have today is the edifice of figures making up Gross National Product, or the esti-

mated sum-total of the value of all goods and services produced by the economy. That measure of the functioning of our economy is watched intently by government officials and by the scores of thousands of people in our business enterprise and farm economy who must be continually alert to changes in economic conditions. That edifice, representing one of the great advances in the history of economic measurement and analysis, could never have been constructed without the benchmark figures secured from census enumerations. This dependence has been strongly emphasized by many of those who appeared before this Committee. Even more strongly they have emphasized that further neglect of the congressionally authorized census programs may reduce this Gross National Product edifice to a hollow shell. At best that edifice of figures must be painstakingly built up from one set of estimates to another; and the farther we get from the solid bricks and stone and timber and steel of comprehensive census enumerations, the more fragile and uncertain our working materials become.

SCHOLARS AND SCIENTISTS

Notable among the users of census benchmark records are the scholars, social scientists, and physical scientists in our universities, in our public and quasi-public research organizations, in the research organizations and departments maintained by many business concerns and associations, and among the thousands of research workers whose research is financed by our philanthropic foundations. Even the most practical-minded must regard this network of fundamental research, as well as the far-seeing administration, management, and philanthropy that have made it possible, as one of the conspicuous achievements of our civilization.

In the final analysis our civilization is dependent on fundamental research, which continually pushes forward the frontiers of knowledge, guides our thinking, sets the tone for our society, and in a fundamental sense drives us onward from goal to goal.

It is scarcely possible to exaggerate the depth and pervasiveness of the influence of fundamental research in the fields in which the benchmark records of the Bureau supply the raw materials. This great volume of research by thousands of scholars, scientists, and analysts has profoundly influenced the shaping of the framework of our present-day civilization—the ever-changing framework within which both public policy and private policy operate to further both stability and growth.

BUSINESS USERS

In this catalog of users of census material, we must give special mention to the thousands of analysts, researchers, advertising managers, sales managers, business consultants, trade association executives, and plain businessmen in our business enterprise system who

look to the census records on national, regional, State, county, city, census-tract, and city-block industries and businesses in their search for markets; and who look similarly at the summary and detailed records on population, agriculture, housing, foreign trade, mineral industries, State and local governments, and all the gamut of census figures. Apart from the analysts and researchers, perhaps most of these users never look inside a formidable census volume. But they are users nonetheless, for those records have been extracted for them by someone within their companies or outside; and they are each day making decisions based on this wealth of census facts and figures. Perhaps the presidents of most large corporations do not realize their dependence on census records—but somebody down the line does.

DETAIL AND MINUTIAE

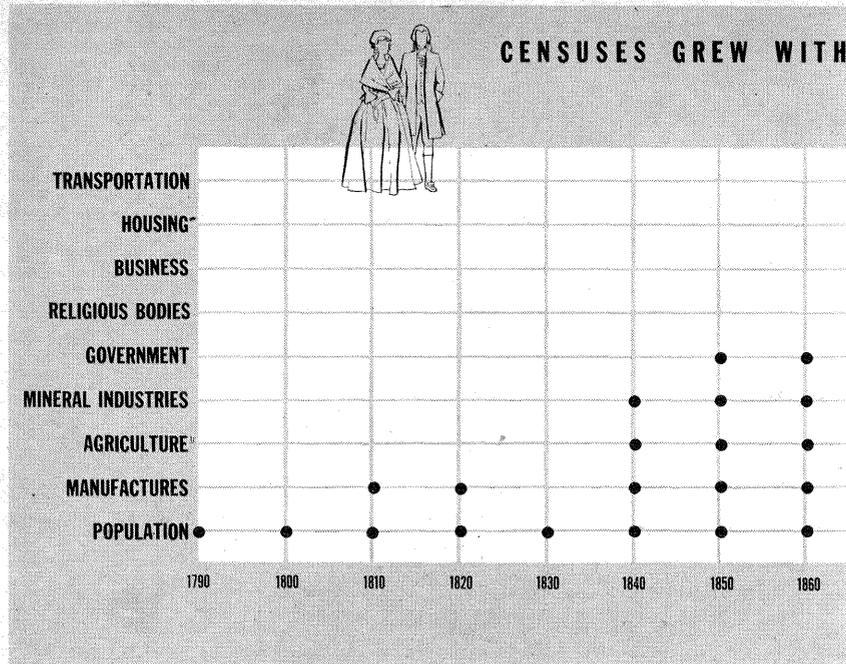
It is the fashion in some quarters "to poke a little fun," perhaps ever so gently, at the detailed statistical records insisted on in the American business system; and similarly at the tendency of our business system to divide up into minute business, trade, professional, and semiprofessional groups, to form associations and organizations, to hold meetings and conventions at which their problems and the facts of their segments are discussed, to issue magazines and bulletins, aimed at improvement of their understanding and practices; and generally to cultivate a community of interest. These humorous thrusts can be viewed with tolerance, for they serve to underline the logic and functioning of our free enterprise system: It is out of the myriad of better-informed decisions by our millions of enterprises that we depend for the level of our well-being, for the stability of our economy, and for the ever-pressing forward movement and growth that characterize it.

DISTURBING RETROGRESSION

Recognizing the fundamental contribution of census records to the functioning of our society, what can we say of the record of our support of these programs in recent years? In plain, unvarnished truth, it is a disturbing record of retrogression.

As stated at the beginning of this report, the 80th Congress in 1948 reviewed the programs of the Bureau and enacted into law (Public Law 671) authority for a carefully planned and staggered program of quinquennial economic censuses—manufactures; retail, wholesale, and service trades; mineral industries; and transportation. That program was the product of decades of experience in census planning and was formulated with the advice of numerous advisory committees of informed users and suppliers of census figures.

That legislation was a notable milestone in the history of census

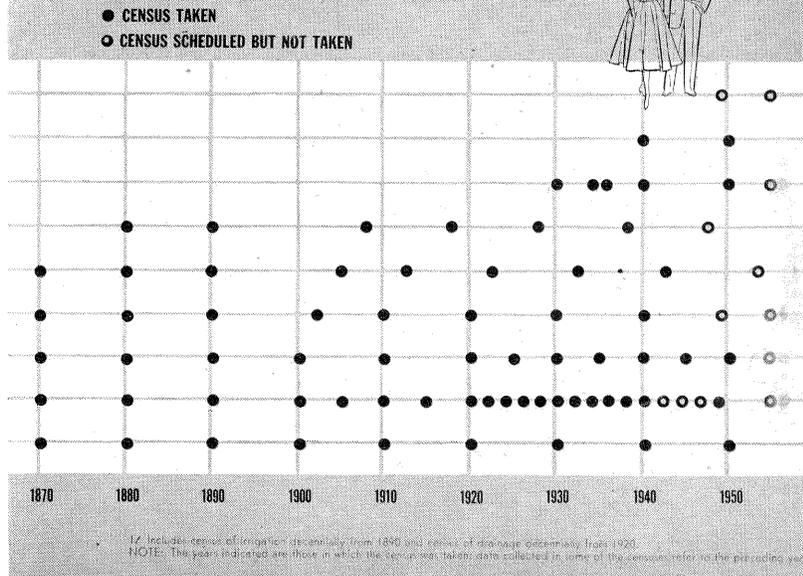


planning, which goes back to 1790, and was widely hailed as a significant forward step. The 81st Congress in 1949 and 1950 rounded out this planning by authorizing a decennial census of housing and a quinquennial census of governments. These and other laws provided for a businesslike scheduling of censuses over the period of a decade, in the interest of more efficient utilization of Bureau staff and equipment and in the interest of avoidance of the wastes and inefficiencies that had attended the undue bunching of too many censuses at the decennial year.

So much, so good, for authority. But what has happened in terms of the vital step of appropriations? The first of these carefully planned and rescheduled censuses to come up for budgetary consideration after 1948 was the census of governments, first taken in 1850, and scheduled to be taken this time early in 1953 on 1952 figures, and each fifth year thereafter. Great care had gone into the planning of that census by an advisory committee of outside experts and the Bureau staff. Despite the fact that the last good census of that type had been conducted for 1932 at the bottom of the Great Depression (the 1942 census having been seriously deficient because of unavoidable wartime reasons), funds were denied.

The second census to come up for appropriations was the historic census of manufactures, first taken in 1810 and scheduled this time to be taken early in 1954 on 1953 figures, and each fifth year thereafter. This census had been on a 5-year basis from 1904 to 1919 and

COUNTRY UNTIL RECENT YEARS



on a biennial basis thereafter, except that those planned for 1941, 1943, and 1945 had not been taken because of wartime conditions. It was taken last for 1947. Many outside advisers and users of the census had very reluctantly concurred in the recommendation for shifting back to a 5-year census, being loath to give up the biennial schedule because of the tremendous changes that were known to be going on in the field of manufacturing. Only very limited "spot-check" funds were provided. Now, strong complaints are being voiced by those who reluctantly concurred in the recommendation to drop the biennial schedule, and they ask whether the meaning is that we are to regress to only a decennial census of manufactures, or back to the 19th century schedule.

The third census to come up was the census of business (retail, wholesale, and service trades), first taken in 1930 and this time scheduled for early 1954 on 1953 figures, and each fifth year thereafter. Again, only limited "spotcheck" funds were provided.

The fourth was the census of mineral industries, first taken in 1840, last taken for 1939, and this time scheduled to be taken early in 1954 on 1953 information, and each fifth year thereafter. Again, funds were not provided.

The next census under review was the census of agriculture, first taken in 1840, conducted at 5-year intervals since 1920, and scheduled this time for 1954. This large and comprehensive census of our more than 5 million farms is the basis for much of the current crop

and livestock estimating and other work of the Department of Agriculture. In accordance with past practices, funds were requested for fiscal year 1954 for the essential preparatory work. No such funds were appropriated, only limited amounts being provided for current "spotcheck" work.

The foreign trade statistics program is a partial victim of this same retrenchment policy, as noted elsewhere in this report. This program, dating back to 1790 and embracing the collection of data from the Customs Service and the publication of detailed monthly and annual figures, has been progressively starved over the past 8 years, to the detriment of our foreign traders, government agencies, and analysts; and to the embarrassment of the world's chief trading Nation.

What all of this story of retrenchment adds up to is not a pretty record, and strenuous efforts will be required if the damage done is to be repaired.

Statistical programs, by and large, command no pressure groups, and the damage done by their impairment is not of an immediate sort visible to the naked eye, unaided by an understanding of the vital role they play in our economy and in our society generally. If we are to be successful in maintaining a high level economy of reasonable stability and growth, that role must be protected.

COST OF NEGLECT

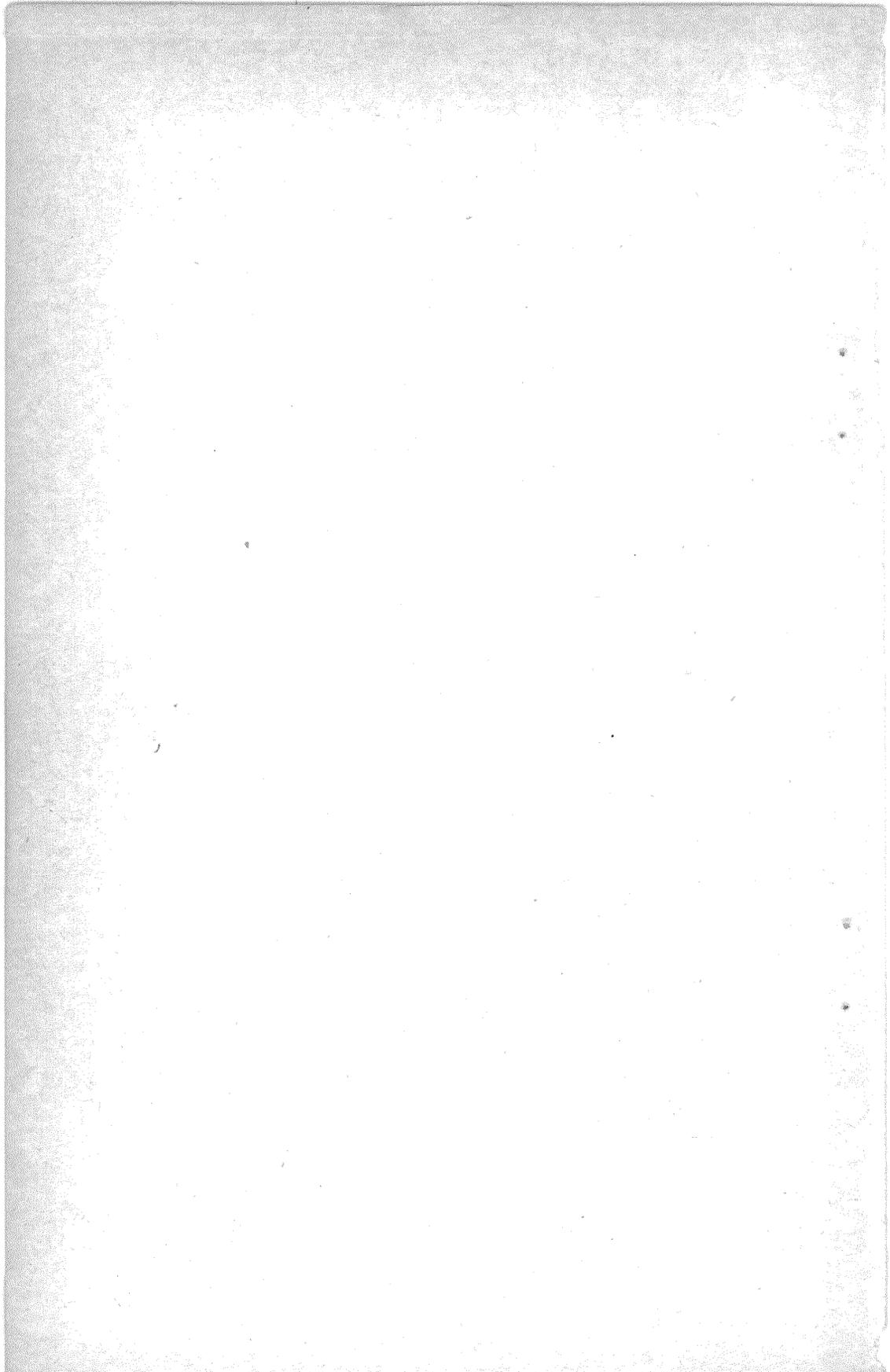
This Committee is convinced that this erosion in census programs has proceeded from neglect, in consequence of preoccupation with the budgetary and other demands of the defense emergency. That explanation is replete with irony, for in truth our economic strength is the foundation of our military strength and one of the major elements in our leadership of the free world.

Both governmental policy and private business policy must always be flexible, and ready to meet the shifting needs of changing economic conditions. That requirement is implicit in the meaning of the term by which we best describe the American economy: A dynamic economy. These changes in public and private policy stem—and must stem—from analysis and appraisal of the many current economic indicators which record conditions and trends. Many of these indicators are direct products of census programs, and most of the others are dependent in one way or another on census records.

As an example of this dependence of policy on statistical records, we believe it can be said that the comprehensive programs presented by the President to the Congress early in 1954 could not have been conceived and formulated without benefit of analysis of the extensive system of current economic indicators.

Both measures of markets and indicators of economic conditions and trends similarly provide the guidance for intelligent business decisions.

Continued neglect and erosion of the primary source for these measures of markets and economic indicators are of grave import to every citizen of our country.



PART IV.—CENSUS ROLE, SCOPE, AND COSTS

ROLE OF THE BUREAU OF THE CENSUS IN FEDERAL STATISTICS

The Bureau of the Census is the largest statistical agency in the Federal Government. Its program for current statistics alone is larger than that of any other statistical agency. Over a 10-year period, covering all the censuses, the Bureau probably collects more information than all the other statistical agencies of the Federal Government combined.

Statistical work of the Federal Government is organized on a decentralized basis, responsibility for collecting current statistics in each of the different fields being assigned to the Federal agency responsible for programs in that field. In accordance with this plan, the Bureau has the responsibility of collecting statistics for the program areas under the jurisdiction of the Department of Commerce, and it also has the responsibility of collecting general purpose statistics, including the different censuses. Thus, the Bureau is responsible for compiling, in addition to the censuses, current statistics on population, foreign trade, manufactures, retail trade, wholesale trade, and governments, aside from those statistics in these industrial areas collected and used by other agencies in carrying out their programs.

As a general purpose statistical agency, the Bureau may be considered a service agency to provide information for other departments of the Government, very much as an accounting department provides information regarding a business concern to its officials. The Bureau makes its statistical facilities available to all departments of the Government as well as to private users under certain conditions. It prepares many special tabulations of statistics already collected, and also conducts complete surveys for others, mostly Federal, State, and local units of government. Those who request such special surveys are, of course, charged for them. The Bureau also furnishes advice to other agencies of the Government, to provide them with the experience and knowledge of collecting and processing procedures that are acquired in the large-scale census activities.

LEGAL AUTHORIZATION

The original authority for the taking of a census is contained in Article I, section 2, of the Constitution, which provides for decennial censuses of population to be taken as Congress shall direct.

Since the first legislation providing for the taking of the first census in 1790, many acts have been passed that, in addition to directing the taking of the decennial censuses of population, have provided for censuses of agriculture, manufactures, and other subjects. The most comprehensive of these now in effect was enacted by the 80th Congress in 1948, providing for quinquennial censuses of manufactures; retail, wholesale, and service trades; mineral industries; and transportation; and authorizing special interim statistical studies. This legislation and the authorization by the 81st Congress in 1949 and 1950 of a decennial census of housing and a quinquennial census of governments rounded out a carefully planned program of censuses staggered over a decade. Other legislation provides for the collection of statistics on cotton, cottonseed, fats and oils, red cedar shingles, and miscellaneous social items (including a decennial census of religious bodies).

The collection of statistics on foreign commerce, although initiated in 1790, was first provided for by statute in 1820, and this law remains virtually unchanged today. It was not until 1941 that this activity was transferred to the Bureau of the Census. Prior to that time, the function had been lodged in several agencies, including the Treasury Department and the Bureau of Foreign and Domestic Commerce of the Department of Commerce.

The act of 1929 provided for the taking of a census of population every 10 years, thus eliminating the need for specific authorizing legislation every time a decennial census was due to be taken, as had been the prior practice of the Congress. The legal authority for the Bureau's activities is summarized in table A.

Prior to 1902 the Census Office was a temporary establishment, existing for part of each decade. In 1902 the Congress passed an act which made the Census Office permanent, and placed it within the Department of the Interior. The act of 1903 established the Department of Commerce and Labor, and provided that the Census Office would be a part of that Department. The act of 1913 made separate departments of Commerce and Labor, the Census Office remaining a part of the Department of Commerce.

TABLE A.—Legal authority for activities of the Bureau of the Census

General Administrative Authority: 32 Stat. 51, 53; 13 U. S. C. 1, 2, 4

MAJOR CENSUSES

Census	Present authorized frequency	To be taken in years ending in										First taken	Present authority	
		0	1	2	3	4	5	6	7	8	9			
Population.....	10 years.....	x											1790	46 Stat. 21, 13 U. S. C. 201.
Housing ¹	do.....	x											1940	63 Stat. 413, 42 U. S. C. 1442.
Agriculture.....	5 years.....	x				x							1840	46 Stat. 21, 13 U. S. C. 201; 66 Stat. 736, 13 U. S. C. 216.
Irrigation.....	10 years.....	x											1890	46 Stat. 21, 13 U. S. C. 201.
Drainage.....	do.....	x											1920	46 Stat. 21, 13 U. S. C. 201.
Manufactures.....	5 years.....					x					x		1810	62 Stat. 478, 13 U. S. C. 121-123.
Mineral industries.....	do.....					x					x		1840	62 Stat. 478, 13 U. S. C. 121-123.
Business.....	do.....					x					x		1930	62 Stat. 478, 13 U. S. C. 121-123.
Transportation.....	do.....					x					x			62 Stat. 478, 13 U. S. C. 121-123.
Governments.....	do.....				x						x		1850	64 Stat. 784, 13 U. S. C. 251-253.
Religious bodies.....	10 years.....										x		1880	34 Stat. 218, 13 U. S. C. 111.

CENSUS CURRENT SURVEY OPERATIONS

Subject	Frequency	First taken on present basis	Present authority
Current population survey.....	Monthly.....	1942	32 Stat. 829, 5 U. S. C. 604; 62 Stat. 478, 13 U. S. C. 121-123.
Special surveys of population, housing and other subjects.....	Single-time.....	1902	62 Stat. 478, 13 U. S. C. 121-123; 32 Stat. 829, 5 U. S. C. 604; 47 Stat. 417, 31 Stat. 686; 49 Stat. 292, 15 U. S. C. 189a, 192, 192a.
Cotton ginning.....	12 specified dates per year.....	1902	43 Stat. 31, 13 U. S. C. 71 and others.
Industry reports.....	Monthly, quarterly, or annual according to need for the particular survey.....	1902	62 Stat. 478, 13 U. S. C. 121-123; 43 Stat. 31, 13 U. S. C. 71-76; 61 Stat. 457, 13 U. S. C. 81-86; 32 Stat. 829, 5 U. S. C. 604; 64 Stat. 798, 50 App. U. S. C. 2061 et seq.
Business reports.....	Monthly, quarterly, or annual according to need for the particular survey.....	1938	62 Stat. 478, 13 U. S. C. 121-123; 32 Stat. 829, 5 U. S. C. 604; 64 Stat. 798, 50 App. U. S. C. 2061 et seq.
Foreign trade reports.....	Monthly and annual.....	1790	R. S. 336, 15 U. S. C. 173; 32 Stat. 826, 5 U. S. C. 601; 60 Stat. 1097, 46 U. S. C. 92, 95; and others.
Government finances.....	Annual.....	1898	62 Stat. 478, 13 U. S. C. 121-123.
Government employment.....	Quarterly.....	1940	32 Stat. 829, 5 U. S. C. 604; 62 Stat. 478, 13 U. S. C. 121-123.

¹ Housing inquiries have also been included as part of the population census.

ENUMERATIONS, SAMPLE CENSUSES, SAMPLE SURVEYS, AND ESTIMATES

Four main types of census activity are referred to in this report—*enumerations* or *complete censuses*, *sample censuses*, *sample surveys*, and *estimates*.

In the *enumeration* or *complete census* an attempt is made to count all persons or other units in the subject field to be covered. Actual totals are provided for small as well as large geographic areas. Possible sources of error are largely restricted to the responses to particular questions and to the extent of under- or over-enumeration.

In complete censuses, some of the questions may for economy be asked of only a sample, such as every fifth person. For example, this was done with the income question and a few others in the 1950 population census.

The *sample census* is designed to achieve with a predetermined but tolerable degree of sampling error many of the purposes of a complete census, such as State totals for a wide range of economic and demographic items. It requires the coverage of a systematically determined part of the whole universe to be canvassed. Such a sample census cannot satisfy all the needs for totals down to the smaller geographic areas, such as the county or census tract, without approaching in size and cost the scope of a complete census. Its principal virtues as compared with the complete census, are savings in cost and promptness in producing results. A sample census differs from a sample survey, described below, in degree rather than in kind.

The term *sample survey* is used to describe a collection of information on a smaller-scale sample. It differs from the sample census in that it does not represent in any sense a substitute for a complete census because it produces totals for only a limited number of items or activities and usually only on a national or possibly a regional basis. Its use extends greatly the advantages of low cost and timeliness found in the sample census but at a further sacrifice in detail. Examples of *sample surveys* are the current population survey, in which national monthly estimates of the labor force and unemployment are secured; and the current business reports, in which estimates of the national volume of retail trade are prepared monthly for about 25 kinds of business.

Two different uses of the term *estimate* must be noted. In the sense in which the term is used in connection with sample censuses and sample surveys, it means a figure of measurable reliability calculated from the survey results. On the other hand, the term is also used in connection with such activities as the monthly computation of the population totals for the United States, based on the most recent census supplemented by somewhat incomplete data on births, deaths, immigration, and emigration. Although the method of making the

latter type of estimate does not permit a simultaneous measure of its reliability, the Bureau does indicate to the users in other ways the limitations of the estimating procedure.

The advantages of timeliness in most sampling activities is an important one, particularly since the most frequent criticism of the Bureau relates to the delay encountered in publication of census results. The savings in cost stem not only from the smaller number of units canvassed and of responses tabulated, but also from the possibility of employing continuously a smaller and better trained staff with more frequent collections on a smaller scale than under a system relying exclusively upon complete censuses spaced at relatively infrequent intervals.

PROPORTION OF TOTAL ECONOMIC ACTIVITY COVERED BY THE ESTABLISHMENT CENSUSES

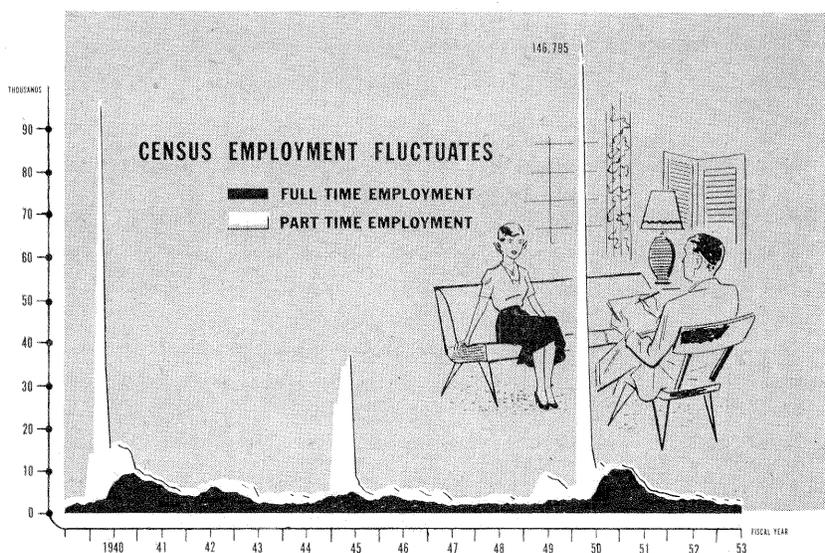
There are many things to consider in determining the need for each of the different censuses, including the uses to which the statistics are put by private organizations and government, the availability of similar statistics from other sources, and the cost of collecting and compiling the statistics. For the most part, judgments regarding the needs for the censuses must be based upon qualitative information.

One quantitative measure of importance is provided by the contribution of the industries covered in each of the censuses to total national income. Such a measure, if used with proper caution and with regard for the additional considerations, can be helpful in making these judgments. The following figures show that about three-fourths of the economy is covered by authorized census programs and indicate the relative contribution of each industry group to the total.

	<i>Percent of 1952 national income</i>
Industries covered in census programs.....	73.9
Manufacturing.....	31.2
Business (retail, wholesale, and service trades).....	20.7
Government.....	11.6
Agriculture.....	6.6
Mineral industries.....	2.1
Selected transportation.....	1.7
Industries not covered in census programs.....	26.1
Finance, insurance, and real estate.....	8.6
Contract construction.....	5.1
Other services.....	5.6
Other transportation.....	3.6
All other.....	3.2

10-YEAR SCALE IN MEN AND DOLLARS

Two of the major censuses, population and housing, are taken only once in 10 years. As a result there is a peaking of census operations extending over a period around the end of each decade. Bureau of the Census employment approached 150,000 for a brief period early in 1950, as shown in the accompanying chart. These were, for the



most part, field enumerators, selected, trained and supervised, and paid and discharged, all within a few months' time. The chart also shows the secondary peak at the mid-decade, reflecting the quinquennial census of agriculture. This census likewise helps to raise the decennial peak. Whereas the greatest fluctuation occurs in part-time employment, and those in this class are frequently housewives or those having other forms of employment, there are also wide variations in full-time employment.

The counterpart of this picture of fluctuating employment is shown in dollar costs in table B. These annual figures show less severe fluctuations than monthly employment but further illustrate the extremes under which the Bureau must operate.

TABLE B.—Summary of Bureau of the Census financing—Actual obligations, fiscal years 1940 through 1954

[Thousands of dollars]

Year	Total, all funds	Appropriated funds			Outside funds
		Total	Annual recurring activities	Major censuses	
1940	27,742	27,738	12,681	25,057	4
1941	22,584	22,566	12,787	19,779	18
1942	10,711	9,666	13,480	6,186	1,045
1943	15,216	9,938	13,228	6,710	5,278
1944	9,390	3,785	3,530	255	5,605
1945	18,274	13,883	5,506	8,377	4,391
1946	15,104	13,566	8,576	4,989	1,539
1947	13,464	12,454	11,090	1,364	1,010
1948	9,670	9,256	7,056	2,201	414
1949	15,742	15,200	6,574	8,627	541
1950	63,530	62,861	6,817	56,044	668
1951	36,359	34,606	6,975	27,631	1,754
1952	20,651	17,255	6,898	10,337	3,416
1953	14,926	11,972	6,793	5,180	2,954
1954 ⁶	10,019	8,359	6,770	1,589	1,659

¹ Activities currently known as "General Administration and Current Census Statistics" were financed from Decennial Census Appropriations for Fiscal Years 1940 through the first half of fiscal year 1943. Amounts shown are estimated.

² Foreign trade transferred to the Bureau of the Census on May 1, 1941 (Fiscal Year 1941), but mostly financed by working funds through the war years.

³ Sample survey section transferred to the Bureau on August 24, 1942 (Fiscal Year 1943).

⁴ Vital statistics transferred from the Bureau on July 16, 1946 (Fiscal Year 1947).

⁵ Age and citizenship certification placed on self-sustaining basis on Jan. 1, 1952. (Approximately \$100,000 appropriated annually for this service in prior years. Exception: Appropriated funds ranged from \$554,000 to \$145,000 from 1943 through 1946.)

⁶ Under appropriated funds, amounts shown represent appropriations not obligations; outside funds are estimated.

COMPARATIVE COSTS OF RECOMMENDED PROGRAMS

In arriving at its program recommendations, the Intensive Review Committee has been mindful of the need for economy, but no predetermined goal was set for a reduction in costs. At the Committee's request the Bureau of the Census supplied actual expenditure figures for all major programs as well as the estimated dollar cost for each of the modifications considered or recommended by the Committee. The summary results are shown in table C.

All projections are necessarily based on present-day price levels, which are much higher than those for past decades. Also, they take into account increased costs resulting from such factors as growth in the population. Comparisons are most meaningful on a decade basis because some of the largest items of expenditure occur only once in 10 years. Past figures in table C have not been adjusted for changes in the price level, although it must be borne in mind that these have been large in a decade and a half. Consumer prices, for example, almost doubled between 1940 and 1954.

In the specific recommendations for each program, estimated costs, assuming the adoption of the recommendations, are given; and these have been totaled and compared on a decade basis. Whereas a comparison of the decade ahead (fiscal years 1955-64) with that in the

immediate past (fiscal years 1945-54) shows an increase in costs from \$200 to \$241 millions, a comparison of three full decades almost equally divided between actual past costs and estimated future costs reveals an eventual leveling off in costs. The estimated future costs were computed in terms of present salary levels and take into account the increased workload that will result from population growth.

If, however, past costs are adjusted upward on the basis of present salary levels, the comparison of three full decades shows a declining trend of costs. Both the unadjusted and the adjusted costs are as follows:

Fiscal years	Millions of dollars	
	Unadjusted for salary changes	Adjusted for past salary changes
1941-50.....	173	252
1951-60.....	232	235
1961-70.....	228	228

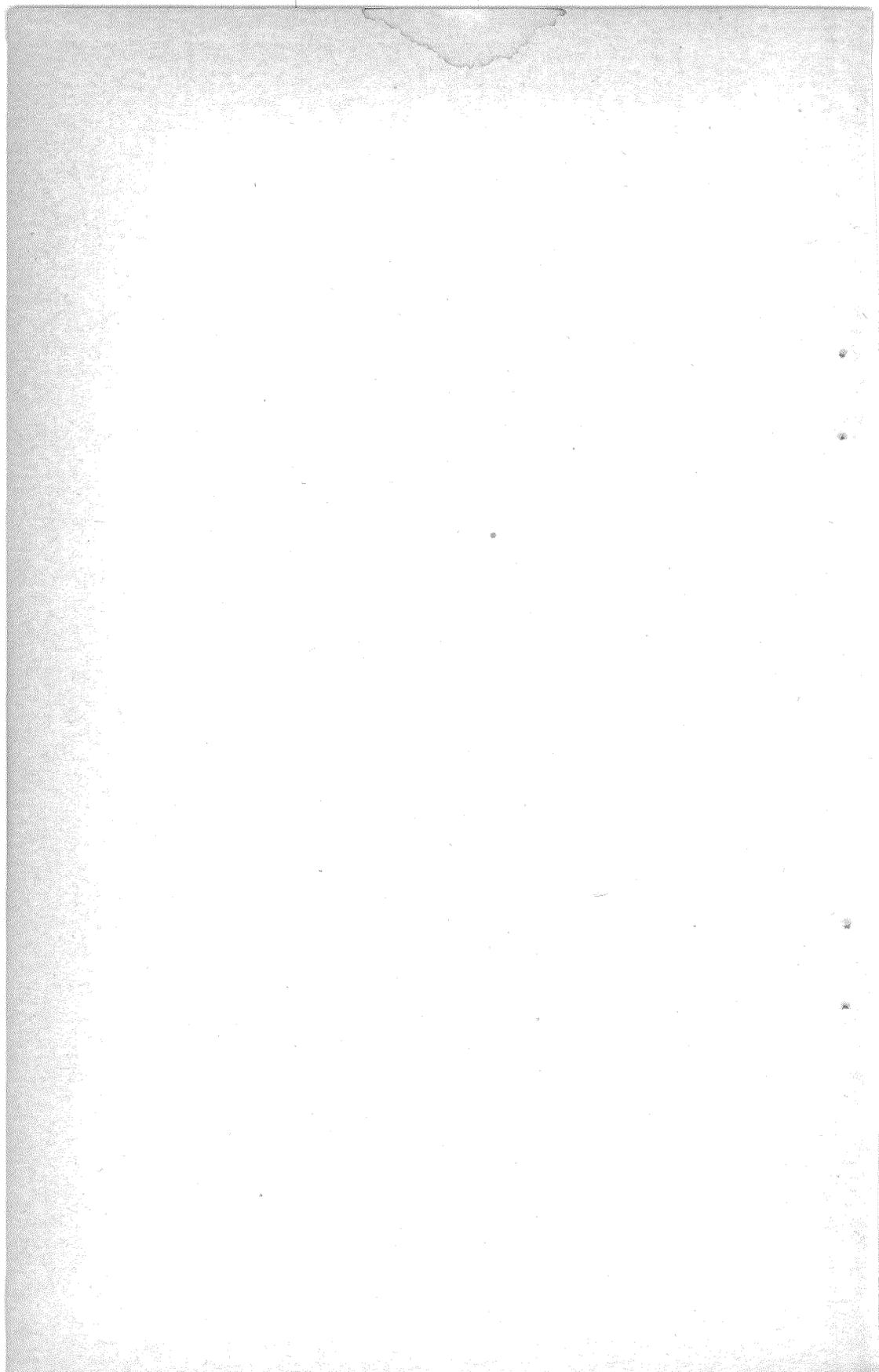
In comparing the decade of the 1940's with the 1950's and 1960's, it should be noted (1) that costs, largely in the form of salaries, were at a much lower level in the 1940's and not likely to be even approached in the future, (2) that the population and most other items counted were smaller in number than they will be in any future decade, and (3) that a number of authorized censuses were either not taken or not completed in the decade of the 1940's. For example, censuses scheduled during the war years were not conducted.

The virtual stabilization of costs in these figures between the 1950's and the 1960's results from the fact that the improvements and innovations recommended by the Committee would be less costly than the programs they would supplant, thus offsetting the higher costs from rising population and size of the economy. Looking ahead a decade or more, the Committee believes that a better statistical program can be achieved at no overall increase in costs, despite rapidly growing population and national output. Although not reflected in the estimates used here, it is to be expected that increased efficiency resulting from improved methods of sampling and greater use of electronic equipment should either produce better statistics more promptly or result in lower costs, or both. It is too early to try to measure these potential savings.

TABLE C.—Actual and estimated obligations of the Bureau of the Census, 1940-70

	Fiscal year—	Actual or estimated obligations ¹ (millions of dollars)	
Actual.....	1940	27.7	
	1941	22.6	
	1942	9.7	
	1943	9.9	
	1944	3.8	
	1945	13.9	
	1946	13.6	173 (1941-50)
	1947	12.5	
	1948	9.3	
	1949	15.2	
	1950	62.9	
	1951	34.6	
	1952	17.2	
	1953	12.0	
	1954	8.4	
	1955	34.4	232 (1951-60)
	1956	17.1	
1957	9.1		
Estimated.....	1958	8.3	
	1959	17.4	
	1960	73.5	
	1961	33.0	
	1962	16.0	
	1963	15.5	
	1964	16.4	
	1965	16.6	228 (1961-70)
	1966	10.2	
	1967	11.9	
	1968	9.1	
	1969	21.3	
		1970	78.0

¹ Exclusive of outside funds. In comparing costs for the decade of the 1940's with those for the later decades, the reader should note carefully the three factors described on p. 78.



PART V.—SPECIAL PROGRESS AREAS

USE OF ADMINISTRATIVE RECORDS

Major changes in the Federal statistics program are under way as a result of the development of the Social Security System and the extension of the income tax to low income groups. The income and social security tax returns contain a large amount of economic data, with comprehensive industrial coverage. Some steps have already been taken to utilize these records in combination with conventional statistical techniques to produce statistical reports at low cost. For instance, *County Business Patterns*, which presents county statistics by industry, is compiled from reports submitted by employers under the Federal Insurance Contributions Act. This approach promises major changes in the whole Federal program of collecting industrial statistics. As an example, the conventional field canvass for the next census of business will probably be replaced by a procedure of obtaining reports for large establishments from a mail canvass based on Bureau of Old-Age and Survivors Insurance records; and reports for small establishments directly from income tax returns. The cooperation of the administrative agencies is requisite to the success of such a program.

Under the present tax laws, all businesses file one or more tax returns with the Federal Government. The most comprehensive return, that relating to income tax, covers practically all businesses. Another, the employer's return under the Federal Insurance Contributions Act, affects all employers, or about two-thirds of all business concerns. Both of these returns contain some information similar in definition and concept to that collected by the Bureau. Recent developments suggest that, with the cooperation of the administrative agencies, access can be had to the relevant data on the tax returns for statistical purposes. To the extent that such data can be substituted for information directly collected, there are two advantages. First, the burden of reporting is reduced for business concerns, and, second, the cost to the Bureau of the Census is reduced to the extent that the cost of obtaining access to the tax returns is less than the cost of an independent collection. Tentative investigations by the Bureau suggest that the savings would be substantial.

It appears that the kind of data found on the tax returns is particularly well adapted to serve the needs of those concerned with sta-

tistics for counties, cities, and towns. These data include business receipts and inventories from income tax forms, and employment and payrolls from social security returns, all classified by kind of business and geographic location. Such small area data are ordinarily published only in a complete census and are the most costly statistical compilations because they have in the past required a field canvass of all business establishments. Thus, the substitution of tax information for direct collection appears to offer a likely method of introducing major savings in the cost of a complete census. These returns also offer possibilities for other types of publications in which the primary interest is in national aggregates.

There are some important unresolved questions regarding the accuracy of certain other aspects of the tax returns for statistical purposes. There is some question as to whether the kind of business information entries on these reports is adequate for census purposes. There is little doubt that certain of the detailed classifications ordinarily provided in the census of business, for instance, grocery stores with or without meat, cannot be obtained solely from the information on the tax reports. On the other hand, it may be possible to obtain satisfactory kind-of-business information for most industries from the tax returns and to obtain needed information for certain other industries as a result of a simple and low-cost direct canvass or perhaps by a mail questionnaire. Investigations of this problem are under way.

The present plan is to use the income tax returns only for small establishments. While such establishments contribute a relatively small part of the total employment or sales of their industries, they account for most of the total number. This relation between number and importance of business concerns is what makes the use of the tax returns most promising. The Bureau can obtain from the tax returns information for most of the business concerns. The resulting savings promise to be substantial. Fairly large errors in the returns for small establishments can be tolerated, since the effect of such establishments upon the aggregate statistics is relatively small. This fact makes it possible to use certain tax returns for statistical purposes even though they do not come up to the standards set for the large establishments.

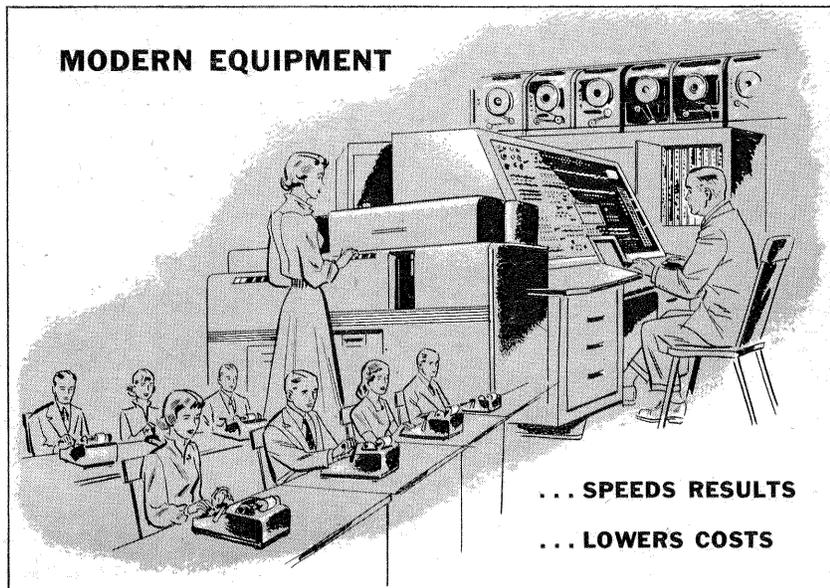
The potential economies from the Bureau's use for statistical purposes of tax and social security records appear to be large and merit close study. It must be emphasized, however, that under the law against disclosure of reports made directly to the Bureau of the Census, there can be no use of these reports for tax or other law-enforcement purposes, and no access to them by other than sworn employees of the Bureau. The flow of information, in other words, must be a one-way flow, and the Bureau of the Census cannot reciprocate by making its own records available to administrative agencies.

MECHANICAL AND ELECTRONIC EQUIPMENT

Among the accomplishments of the Bureau of the Census over the years has been the development of labor-saving devices. Both the Hollerith and Powers systems of punch card tabulation had their origins in the Bureau, and the development of new devices and techniques in this field has continued. Although the Bureau relies heavily on standard equipment manufactured by commercial concerns, it uses a wide variety of machines of its own design, developed and maintained by the Bureau for the performance of functions for which standard equipment is not always adapted.

The Bureau early recognized the possibility of applying electronic calculations to statistical problems, and financed the first high-speed electronic computer of a type suited to census operations. Although the machine was put into operation at the factory immediately upon acceptance in early 1951, full utilization was not achieved until some time after the machine was installed at Bureau headquarters in April 1953. The improvement was due not only to the relocation of the machine, but also to additional training of personnel and the development of new techniques. The machine is presently operated on a round-the-clock, 7-day week basis.

By far the most frequent criticism of Bureau programs has been the length of time required to publish census results. The Committee has, therefore, explored possible ways of reducing the lag, and believes that a still greater use of electronic equipment offers one of the most fruitful means. Equally important, more economical operations re-



sult. Actual experience with the electronic computer in producing such series as the *Monthly Report on the Labor Force* has indicated savings in time and cost. Bottlenecks still exist in the use of this system. The most immediate need is for a printer with a speed more commensurate with that of the output of the computer, and the Bureau has recently entered into a contract for the construction of such equipment. There appear to be other developments of electronic equipment that will further speed up census results. One such development is an electronic device designed at the National Bureau of Standards for the Bureau of the Census capable of automatically transferring data from questionnaire to magnetic tape, thus eliminating several costly and time-consuming operations. Another development is a more reliable piece of equipment for transferring data from punch cards to tape.

The Bureau's initial request for \$1,000,000 for a second electronic computer was dropped from its budget for fiscal year 1954. There is evidence that additional equipment of this general type can be of assistance in the authorized censuses that this Committee has recommended should be taken. The Bureau's staff believes that one additional computer would cover the principal requirements for all except the decennial census, but that a considerable additional increase in capacity would be needed for the 1960 census. The Committee does not feel qualified to appraise these technical needs, but it is impressed with the possibilities of electronic equipment and urges that the need be carefully explored. Further consideration should also be given to the overall needs of the Government and the Department of Commerce for this type of equipment.

Such a review of needs should take into account the possibility of economies of concentrating electronic equipment in one bureau or in one or perhaps a limited number of agencies of the Government. The obvious economies of concentration, reflecting the high unit cost of such equipment and relative scarcity of trained personnel, must be weighed against possible disadvantages such as increased vulnerability and problems encountered by centralized management in resolving competing demands for service. The broader aspects of this problem should be reviewed by the Government, perhaps by the Bureau of the Budget or the current Commission on the Organization of the Executive Branch of the Government.

Recommendations

See numbers 39 to 41, page 14.

ADVISORY COMMITTEES

Because the Bureau of the Census is a central statistical service agency and because its data are intended for wide public use, it has

endeavored to maintain close contact with the persons and agencies outside the Bureau having a knowledge of the needs as well as the problems of collecting and publishing statistics. The Bureau depends to a large extent on voluntary cooperation from the public in securing statistics, and it endeavors to collect them without resorting to its mandatory powers.

The Bureau has found that advisory committees, including a wide range of economic, civic, and professional interests, as well as a wide geographic representation, have been very useful. They assist in the continuing evaluation of the data collected and published by the Bureau and they render valuable assistance in selecting from the many suggestions for additional data which the Bureau receives those of most merit. Since the committees include representatives of the per-



sons who would supply the data, they are aware of the records which may be available as sources of information and of the workload which a request for information would place on the respondents. Their awareness of these matters has made them reluctant to ask for more information than can be readily supplied by business or the public. They offer useful advice in reducing the burden of necessary inquiries to the respondents. Because they represent a diversity of interests and groups, they frequently assist in interpreting the needs for and uses of the data to be collected and thereby increase the degree of voluntary cooperation.

The advisory committee representing the broadest range of interests is that appointed by the American Statistical Association. This committee normally includes members with special competence in each of the major fields of activity of the Bureau. This committee advises the Director on matters of general policy and serves to coordinate recommendations which come from the more specialized committees. It meets about four times a year.

The advisory committees of the American Marketing Association and the American Retail Federation have been active over a long pe-

riod of years and have concerned themselves especially with the census of business and with current business statistics. Recently the American Political Science Association and the American Historical Association in cooperation with the Mississippi Valley Historical Association have appointed advisory committees.

There is also a continuing Census Advisory Committee on State and Local Government Statistics, appointed by the Director in consultation with interested agencies and groups.

At the time of a major census, advisory committees are appointed to give more detailed consideration to the specialized problems which arise in relation to that census. At the time of a census of agriculture, for example, the farm organizations, the agricultural publishers, State agricultural commissioners, land-grant colleges, and the Department of Agriculture are invited to designate representatives to an advisory committee for that census.

During the planning and conduct of the 1950 census program, technical advisory committees were appointed by the Director to deal with population statistics, economic statistics in the census of population, housing statistics, and residential financing, in addition to the committee on agriculture statistics. Each committee consisted of 10 to 15 specialists representing business, government, civic, and other groups with an interest in the statistics to be produced.

From time to time the Bureau also works with special advisory groups which concern themselves with special projects which the Bureau is considering or has underway; for example, the preparation of census monographs and the report, *Historical Statistics of the United States, 1789-1945*, and the definition of urbanized areas for use in the 1950 census.

The Bureau of the Census makes extensive use of the system for statistical coordination in the Federal Government which is carried on by the Office of Statistical Standards of the Bureau of the Budget. Every major statistical operation is reviewed with the Office of Statistical Standards, and this office frequently names special committees representing the interested Federal agencies to advise the Bureau of the Census on its program. Through the Office of Statistical Standards, the Bureau has access to consultative groups such as the Advisory Council on Federal Reports, which has a major role in certain of the reporting programs, particularly in manufacturing and distribution. Through that Office, the Bureau also has access to the Labor Advisory Committee on Statistics and the Advisory Committee on Statistical Policy.

There is consultation with users and suppliers of data in the preparation of any major reporting program. The work done in recent years to prepare for the censuses of manufactures and business illustrates this process. In planning for both of these censuses, a syste-

matic effort was made to assure that every national trade association and a large number of trade journals had an opportunity to review drafts of proposed reporting forms and to make suggestions for their improvement. A sample of individual business concerns, including all of those which had specifically requested an opportunity to review census forms, was also included in the review program. In connection with the census of business planned for 1953, letters concerning the plans were sent to 498 trade associations, including all the national associations, and to more than 300 trade papers. Responses were received from nearly half of these. In addition, meetings were held with more than 90 associations. Many individual companies were also consulted.

For the census of manufactures planned for 1953, the 200 separate schedules required to show commodity detail were extensively cleared with a total of about 3,900 business representatives. About two-thirds of these were manufacturing companies, and most of the remainder were trade associations.

Broadly representative advisory committees are an effective device for bringing to the attention of the Bureau the changing needs of users of statistics, as well as the changing situation with reference to supplying data required by the Bureau.

Recommendations

See numbers 42 and 43, page 14.

CENSUS TRACTS

Beginning with the decennial census of 1910, the Bureau of the Census has compiled and published census records by small areas or census tracts within an increasing number of the larger cities of the country, 60 in 1940 and 64 in 1950. The Bureau tabulated the figures for 1910, 1920, and 1930, but did not publish them, the tabulations being sold to the cities for their use and publication.

Census tracts are small geographic areas or neighborhoods within a city and its environs for which census data are compiled. They are laid out with a view to approximate uniformity in population and with some regard for uniformity in size. They have been designed so that each tract is fairly homogeneous with respect to such factors as economic status and racial characteristics.

Census tracts have been established by local committees with the cooperation of the Bureau in most of the larger cities throughout the country. In many cases the tracted area extends into the environs of the city, and there is a growing demand for the establishment of census tracts in entire standard metropolitan areas. A separate report containing limited statistics on population and housing characteristics based on the 1950 census was published for each of 64 tracted areas.

With the exception of very limited housing data by blocks, this series of reports represents the only publication of data on population and housing characteristics for areas within the larger cities of the country. Thus, the statistics for census tracts represent the only basis for the analysis of census data on the characteristics of the various parts of the larger cities. These statistics are used for many different purposes by a wide range of types of organizations, including city governments, housing officials, real estate interests, business concerns, newspapers, and welfare agencies. Related public and private data have also been compiled on a census tract basis to facilitate comparisons with the census figures for these areas.

The distribution of the population by age and sex for census tracts serves as the basis for analysis of mortality rates and assists local officials in determining the most suitable locations for schools, recreation facilities, libraries, and other public facilities. The trend in total population and in the population in various age and sex groups reveals the areas of growth within a city and indicates the general trend of movement.

These figures are used by planning commissions, public utilities, and other service organizations in establishing plans for the extension of their facilities. The statistics on number of families, home ownership, quality and equipment of homes, family income, educational attainment, and occupational distribution are useful in locating and analyzing the market for a wide variety of goods and services.

The housing statistics by census tracts facilitate the analysis of the characteristics of housing and the market for housing in an area.

In a few areas, census tracts have been grouped into statistical areas for which retail trade statistics have been compiled. The results of these studies demonstrate the usefulness of such data in analyzing the marketing structure and desirable locations for retail and wholesale outlets.

The development and publication of census tract data by the Bureau represent a contribution to the usefulness of its reports. There is a growing demand for small-area figures; and plans for the 1960 census must look toward coverage of a larger number of cities.

PART VI.—SPECIAL PROBLEM AREAS

PROGRAMMING AND FINANCING

The *Task Force Report on Statistical Agencies*, prepared for The Commission on Organization of the Executive Branch of the Government, January 1949, by Drs. Frederick C. Mills and Clarence D. Long, stated one of the problems of the Bureau of the Census in these words:

Advance planning and advance commitment of funds are necessary in a program of basic census work and in some other statistical activities. The system of annual appropriations, with recurrent periods of budgetary uncertainty and occasional sharp fluctuations in the scale of major recurrent statistical programs, has at times made planning and programming difficult and has induced instability in statistical operations. Unexpected changes sometimes result in the loss of funds previously expended on preliminary work.

That problem remains unsolved and in fact has been aggravated by the severe budgetary uncertainties that have developed since the Hoover Commission *Task Force Report* was written.

COMPETING OBJECTIVES OF PROMPTNESS, ACCURACY, DETAILED INFORMATION, AND FULL DESCRIPTION

The Bureau is faced with the necessity of making choices among alternative and competitive objectives in the collection, compilation, and presentation of statistics. It must decide whether its statistics are to be more accurate, more comprehensive, more prompt, more fully described. It is influenced in its decisions by the expressed views of those who use its products, as reflected by demand for its publications, the views of advisory committees, in correspondence, and by other means.

Over the years the Bureau has taken steps to increase the promptness of its reports. It has conducted experiments on the most effective way of obtaining prompt reports from respondents. It utilizes all available means of communication—mail, telephone, telegraph, personal visit. It has applied modern techniques of statistical quality control to insure rapid processing. It has utilized modern equipment and methods, such as the electronic computer, mark sensing, and high-speed printing by machine tabulation, to speed the release of its reports. The objective of prompt release has been given

more emphasis by Government and business leaders in recent months. The Bureau developed, in the fall of 1953, a special sample survey of retail trade which provides statistics on the volume of retail trade by kind of business within 10 days after the month covered by the statistics.

The Bureau must maintain high standards of accuracy in its publications. Objective standards have been developed for use in the screening of returns for completeness. Editing rules have been developed to check the reasonableness of important figures entered on report forms, and correspondence is carried on to verify and obtain revisions of questionable entries. Controls are maintained on later operations, including machine tabulation and printing, to make certain that the final reports are accurate. In the review of report forms, the standards of accuracy required are permitted to vary with the importance of the return. This factor is of particular significance in manufacturing where large plants have much greater effects upon the statistical aggregates than small plants. Furthermore, the size of the sample and the care with which the survey is processed is allowed to vary with the permissible error, insofar as it is possible to determine the degree of accuracy required.

Many users of statistics desire "as much detail as possible." Such requests pose serious problems, because increases in detail often are possible only with substantial increases in cost, both direct and indirect. National totals can be obtained for most items from a relatively small sample. Detailed information, either for small geographic areas or for relatively small industries or commodities, requires reports from substantially all business concerns in the area or industry. The passing from a sample to a complete enumeration will sometimes involve millions of dollars in cost. For example, a sample survey of retail trade, to yield a few national measures of the volume of activity, such as sales and employment, can be conducted each year for less than \$100,000. On the other hand, a full census of retail trade costs millions of dollars. Further detail in the kinds of information provided (merchandise lines in addition to total value of sales) as distinguished from the level of detail of presentation (cities and counties in addition to national totals) requires not only an expansion in the size of the sample, but also an expansion in the size of the report form. This in turn results in a greater reporting burden to respondents, and may significantly reduce the quality of the basic figures because of the general reluctance to complete a long form or answer a long list of questions. This is one of the reasons that the census programs call for the provision of detailed figures in complete censuses only once every 5 or 10 years.

There is a demand on the part of certain classes of users of census data that full descriptions of the methods used in compiling the data

be presented along with the figures. The groups concerned with this feature of the reports are generally research staffs, though all careful users of data want to know something about methods of collection. The Bureau recognizes this demand and has met it to the extent that resources permit. A recent desirable development along this line has been the introduction of a special series of technical papers describing the methods used in conducting the different surveys.

The Bureau has tried to strike a balance among these different and competing objectives. It must be recognized that with limited resources a decision to do one thing usually automatically requires a decision not to do something else. Thus, when the Bureau decides to issue statistics more promptly, it must also decide what is to be sacrificed in making the additional allocation of funds to speed—accuracy, degree of detail, completeness of coverage, or perhaps descriptions of methods.

Although promptness in the publication of statistics is generally desirable, the same degree of promptness is not required for all the statistics. Prompt release of monthly and quarterly statistics is always desirable. This is also true of certain census figures, such as the population counts. On the other hand, the prompt publication of detailed statistics which are collected to serve as benchmarks for current series is less urgent. Examples of such statistics are the annual industrial employment totals and the annual physical volume production indexes. Perhaps even less urgent are some of the statistics collected for special users, for example, fuel consumption by counties. Just as accuracy and speed are often competing objectives, so is prompt publication of different statistics competitive. Decisions to publish some of the figures earlier automatically involve decisions to publish some of the other statistics less promptly. Similar considerations prevail in determining the degrees of accuracy and the levels of detail to be sought.

DISCLOSURE RULE

The Bureau of the Census is prohibited by law from publishing any statistics that disclose information reported under mandatory provisions by individuals or individual business firms.* The 15th Census Act, approved June 18, 1929, provides as follows in Section 11:

That the information furnished under the provisions of this Act shall be used only for the statistical purposes for which it is supplied. No publication shall be made by the Census Office whereby the data furnished by any particular establishment or individual can be identified, nor shall the Director of the Census permit anyone other than the sworn employees of the Census Office to examine the individual reports.

Further, the Act which currently authorizes the conducting of censuses of manufactures, minerals, business, and transportation (Public Law

671, 80th Congress) extends the confidentiality provision of the 15th Census Act to these censuses.

Administratively, the Bureau has maintained through the years stringent disclosure analysis procedures to insure the confidentiality of reported information in all of its publications. In the field of industrial and business statistics, for example, employment data are shown only when three or more companies are included in a statistical total. For value figures, the rules are even more protective: Regardless of the number of companies involved, value data are withheld if one or two companies account for such a large proportion of the total that publication would be tantamount to disclosure.

In view of the extensive cross-tabulation of census statistics by various characteristics (i. e., type of business activity, geographic location, size, degree of specialization, etc.), it has proven necessary to set up fairly elaborate disclosure analysis procedures to assure confidentiality of individual company figures.

The Bureau has recently made an effort to reduce the cost of this disclosure analysis, in planning for the next economic censuses, by developing revisions of its administrative rules to permit the increased use of mechanical means for disclosure computations and analysis and the simplification of the human review, without affecting standards regarding disclosure avoidance.

Over the years the Bureau has earned the reputation among respondents for respecting the confidentiality of records reported to it, and this reputation has been of invaluable aid in encouraging ready response to the Bureau's surveys and enumerations. The wholly commendable purpose of the legislation and its interpretation and strict administration is to make sure that information supplied to the Bureau for statistical purposes is never used for tax or law-enforcement purposes and is never made available to other agencies exercising power in those fields. The disclosure rule must be maintained inviolate with respect to the figures submitted by a respondent.

The Committee believes, however, that in certain respects the law has been interpreted with undue rigidity. Specifically, we believe that a reasonable interpretation of the law would not prevent the Bureau from making available to other Federal agencies for statistical purposes lists of names and addresses of business establishments classified by industries under the Standard Industrial Classification. Making such classified mailing lists available to other Federal agencies to facilitate their administrative and statistical functions would mean a net savings for the Government, and would not disclose any information on the operations of responding concerns.

A somewhat different problem is presented when another Federal agency having the authority to collect information on a mandatory basis wishes access to census returns to save both the Government and

the business concerns involved the cost of a duplicating survey. Clearly, the Bureau of the Census cannot grant that wish. On the other hand, if the responsible official of the business concern authorizes in writing the Director of the Census to supply a copy of his return to the other Federal agency, as a matter of convenience and economy to himself and the Government, we can see no reason why that should not be done.

Recommendation

See number 44, page 15.

LEVELING THE WORKLOAD

Bureau of the Census operations—far more than those of most Government agencies—are subject to sharp variation in scale and nature from one period to another. To a considerable degree, this is inherent in the task of collecting, processing, and reporting statistics for a particular period or date as promptly thereafter as is reasonably possible.

Wide fluctuations in the level of work are costly. During the period of build-up to handle peak loads, expensive “tooling up” is required. For example, it is necessary to recruit or reassign and train employees, and to select—often with very limited basis for judgment—those individuals who seem qualified for supervisory responsibility. At the peak workload stage, less efficiency and greater chance of error exist than with a more uniform workload involving more reliance on experienced personnel. With a sharp cutback from peak activity periods, further costs are encountered in the adjustment of organization and the dismissal or reassignment of personnel. It is often difficult also at this stage to capture and retain, for future application, the lessons which have been learned during the major survey or census activity being completed.

Such problems and costs of workload variation are to some extent an inevitable part of the kind of work assigned to the Bureau. However, much has been and can be done to limit the disruptions in work and the resulting costs and administrative problems.

The Congress clearly recognized this issue in establishing the “Census Office” a half-century ago as a continuing agency—in contrast to the previous practice of setting up an organization to take censuses of population and other subjects each 10 years and thereafter disbanding it. More recently, in 1948, the Congress again recognized this problem in enacting legislation for the periodic scheduling of major censuses and authorization for interim surveys. In part, these enactments were designed to limit somewhat the wide range in scale of Bureau work in the course of each decade.

The recommendations of the Hoover Commission—aiming at in-

creased utilization of Bureau facilities for other large-scale statistical operations of the Government—also offer similar possibilities for some leveling upward of the valleys of total Bureau workload between major censuses.

The Bureau itself has sought to minimize the costs and difficulties arising from wide swings in its total work level. Its organization pattern provides for a pooling of specialized types of skills and operations which are common to statistical work. This is particularly evidenced by the field organization, the machine tabulation division, and the statistical standards unit, whose respective “know-how” and facilities can be tapped for work concerning various subject fields. Another example is to be found in the Bureau’s emphasis on detailed advance planning and pretesting of methods for censuses and major surveys.

In reviewing the Bureau’s programs, the Committee has recognized the importance of this problem of variable workload. Many of the specific recommendations, if carried into effect, will help to level out the fluctuations in workload and will further reduce the problems and costs which such variations involve.

Recommendation

See number 45, page 16.

PUBLICATION

Publications, in the form of releases, bulletins, and bound volumes, are the principal end product of the work of the Bureau of the Census. While the Bureau also provides service to the public and



the Government in the form of direct consultation and the special reproduction of unpublished materials, its basic means of communication is the formal statistical report. The Bureau’s current programs alone produce about 1,000 pages of printed material a month; when a major census is being compiled the output may reach a level

of 5,000 pages monthly. The seventeenth decennial census program produced, during the period 1950-53, about 107,000 pages of preliminary and final reports on population, housing, and agriculture. Of the \$91,000,000 required for these censuses, \$1,700,000 was expended directly for printing costs, and, of course, many millions in addition were spent for preparation of the materials for printing.

The criticisms which have come most prominently to the Committee's attention are:

1. Delay in publication of results.
2. Inadequate publicizing of what is available.
3. Use of small print which is difficult to read.
4. Reduction of free distribution of reports.
5. Failure to publish wanted data.

Promptness

It is difficult to achieve promptness and still maintain high standards of completeness, accuracy, and format, but recent efforts have been made to improve the timeliness of reporting. Among the speed-up methods being emphasized are greater use of sampling to reduce collection and processing time, production of preliminary summary releases in advance of final detailed reports, use of mechanical rather than clerical review for accuracy where feasible, a special progress reporting system to highlight processing bottlenecks, and exploitation of technological developments, such as the high-speed electronic computer and offset printing instead of letterpress.

Timeliness is an important part of the value of statistics, and more attention needs to be devoted to this aim.

Publicity

The Bureau relies on the following devices to acquaint the public with its product: publication of a quarterly *Catalog of United States Census Publications* and monthly supplements, listings in the catalogs of the Superintendent of Documents and in the *Business Service Check List* of the Department of Commerce, special circulars for the more important publications, source notes in the *Statistical Abstract* and its supplements, press releases to facilitate notice in media of public information, displays in field offices of the Bureau and the Department of Commerce and at appropriate meetings and conventions, and speeches and papers by staff members. Its distribution system places copies of its reports in carefully selected libraries throughout the country.

Despite these efforts, many potential users do not become aware of the availability of census data applicable to their needs. The question merits further attention by specialists in the information field.

Legibility

In an effort to conserve printing funds by putting as many figures as possible on each page, the Bureau sometimes goes too far. A case cited elsewhere in this report is that of certain foreign trade publications. The Bureau's reports should be reviewed for readability to insure that type size and style do not sink below generally acceptable levels.

Distribution and pricing

In accordance with Department and governmentwide policy, the Bureau seeks to limit free distribution of its reports to specified exempt classes (for example, Government agencies, selected depository libraries, public information media), and to impose a charge upon all others who wish copies. Current policy represents a considerable tightening in comparison with past practices, but is deemed necessary to prevent wasteful publication and distribution.

The sales price of a regular Bureau publication includes none of the collection and processing costs or the costs of printing copies required for official distribution; it reflects only the additional cost of printing and distributing copies for those who wish them for their own personal use. Printing costs have risen. A complete set of final reports of the decennial census of 1940 cost about \$150; the corresponding reports for 1950 sell for about \$350. The Bureau has no control over printing costs except to make its reports as compact as possible and to use the most efficient and economical methods of reproduction available to it.

In fiscal 1953, sales of Bureau reports through the Superintendent of Documents and field offices amounted to \$315,000, or over 6 percent of total sales of Government publications. In addition, the Bureau collected and turned over to the Treasury \$11,000 from direct sales of processed reports not handled by the Superintendent of Documents.

Absence of wanted data

Given certain funds for publication, the Bureau must decide which kinds of data and what detail will be presented. It is impossible in this respect to satisfy everyone. A manufacturer may complain at the apparent paucity of detailed data on the production of machine tools and at the seemingly extravagant treatment of family structure; others may have an opposite impression.

More extensive use should be made of the advisory committee approach in the planning of Bureau publications, to secure a balanced selection of data and a form of presentation best designed to meet the needs of users.

Recommendations

See numbers 46 to 49, pages 16 and 17.

SPECIAL SERVICES AND TABULATIONS

It is the policy of the Bureau of the Census to charge for services of special use and benefit to private groups and individuals. The Bureau accepts private funds either as fees for special services and special tabulations of individual interest or as payment for conducting surveys and special tabulations of more general interest. It is also part of the program of the Bureau to furnish specialized service to other Government agencies at cost.

Among examples of the first category is the age search function performed by the Bureau. At the request of an individual, the Bureau provides, on a cost basis, transcripts of information from old records as evidence of date and place of birth. The Bureau makes special statistical tabulations from its agriculture, population, business, and manufactures records upon payment of the cost involved. The tabulations may range from a special analysis of commodity detail in the foreign trade statistics to a tabulation of the consumption of selected chemicals by States. Individuals or organizations requesting these special studies are required to defray the total additional cost of the work. Such special compilations are prepared when the schedule of regular work permits, subject to the provision of census law which prohibits the disclosure of information contained in the returns of any individual or organization. Very properly, the Bureau's policy in reimbursable projects is to reserve the right to publish the results, if it sees fit to do so.

Where there is a public interest in the survey results, the Bureau also undertakes projects involving the original collection of data on a reimbursable basis or accepts private funds to do work which could not be done on the basis of its appropriated funds. The fact that the Bureau requires private groups to defray the costs in these cases does not necessarily imply that the information is of narrow significance, but rather that the data were not considered to have as broad a public interest as the published data.

In the foreign trade field, the Bureau produced during fiscal 1953 about 100 monthly and 60 special reports the total cost of which was borne by individuals or small groups of subscribers. The cost of a single subscription ranged as high as \$2,000. Special tabulations are listed along with regular reports in the Bureau catalog, so that other potential purchasers may be aware of them. No exclusive franchises for the use of special materials are granted.

Special population censuses, taken under conditions similar to the nationwide census, are often requested by cities, towns, or other political units. The Bureau takes these, at the expense of the locality, and certifies the population count, which may be used to obtain a higher city classification, a larger share of State revenues, or for other purposes. During the period between the 1940 and 1950 Federal censuses,

more than 400 special population censuses were conducted by the Bureau. The results of the special censuses are published, in brief, in a series of Bureau releases.

With the safeguards and conditions outlined, reimbursable tabulations and similar projects represent a proper part of the Bureau's program, provided such work is not allowed to interfere with its operations leading to publication of reports of general public interest. Special surveys of the Bureau should be confined to projects that are closely related to its unique records and factual fields of interest, that are appropriate to a public agency, and that do not put the Bureau on a commercial basis in competition with private survey agencies.

The resources and facilities in the Bureau of the Census in the form of staff and equipment make it possible for the Bureau to provide survey, tabulation, and consulting services to other Government agencies. Such use of these resources should be encouraged.

LIST 1. AFFILIATIONS OF MEMBERS OF THE INTENSIVE REVIEW COMMITTEE

The members of the Intensive Review Committee served on loan in response to the invitation of the Secretary of Commerce addressed to the heads of their respective organizations. Their affiliations are as follows:

RALPH J. WATKINS, <i>Chairman</i> -----	<i>Director of Research, Dun & Bradstreet, Inc.</i>
MURRAY R. BENEDICT-----	<i>Professor of Agricultural Economics, College of Agriculture, University of California.</i>
JOHN W. BOATWRIGHT-----	<i>General Manager, Distribution Economics Department, Standard Oil Co. (Indiana).</i>
STEPHEN MCK. DUBRUL-----	<i>Executive in Charge, Business Research Staff, General Motors Corp.</i>
PETER LANGHOFF-----	<i>Vice President and Director of Research, Young and Rubicam.</i>
J. A. LIVINGSTON-----	<i>Financial Editor, Philadelphia Evening Bulletin.</i>
MYRON S. SILBERT-----	<i>Vice President, Federated Department Stores, Inc.</i>
LAZARE TEPER-----	<i>Director, Research Department, International Ladies' Garment Workers' Union.</i>
MERRILL WATSON-----	<i>Executive Vice President, National Shoe Manufacturers Association, Inc.</i>

LIST 2. PANEL MEMBERS AND CONSULTANTS

Panel on population

SPIEGELMAN, Mortimer, *Chairman; Metropolitan Life Insurance Co.*
 DEARDORFF, Neva R., *Health Insurance Plan of Greater New York.*
 HODGKINSON, William, Jr., *American Telephone & Telegraph Co.*
 HURLIN, Ralph G., *Russell Sage Foundation.*
 KISER, Clyde V., *Milbank Memorial Fund.*

Consultants to panel on population

ALTMAN, Isidore, *Commission on Financing of Hospital Care.*
 ANGLEMAN, D. M., *New Jersey Bell Telephone Co.*
 BEYER, Glenn H., *Housing Research Center, Cornell University.*
 BOGUE, Donald J., *Scripps Foundation for Research in Population Problems.*
 BRENNER, O. L., *Southern Bell Telephone & Telegraph Co.*
 BRUSH, Waite S., *Consolidated Edison Co. of New York, Inc.*
 COHEN, Henry, *City Planning Commission, New York City.*
 DENSEN, Paul M., *University of Pittsburgh Graduate School of Public Health.*

DUNN, Dr. Halbert L., *Chief, National Office of Vital Statistics, Public Health Service.*

DURAND, John D., *Population Division of United Nations.*

ERHARDT, Carl L., *New York City Department of Health.*

FAGIN, Henry, *Regional Plan Association, Inc.*

GERSHENSON, M. I., *California State Department of Industrial Relations.*

GREEN, Howard Whipple, *Cleveland Health Council.*

GULICK, Luther, *Institute of Public Administration.*

HAMILTON, C. Horace, *North Carolina State College of Agriculture and Engineering, University of North Carolina.*

HEDRICH, A. W., *Maryland Department of Health.*

HUTCHINSON, E. P., *University of Pennsylvania Wharton School of Finance and Commerce.*

JAFFE, A. J., *Bureau of Applied Social Research of Columbia University.*

KIRK, Dudley, *Office of Special Assistant for Intelligence, Department of State.*

KRUEGER, Dean E., *Commission on Chronic Illness.*

LEBERGOTT, Stanley, *Office of Statistical Standards of Bureau of the Budget.*

LEE, Everett S., *Population Redistribution and Economic Growth, University of Pennsylvania.*

LORGE, Irving, *Teachers College of Columbia University.*

MacDONALD, Gordon D., *The Real Estate Board of New York, Inc.*

MADOW, William G., *The Institute for Advanced Study.*

MANDEL, B. J., *Bureau of Old-Age and Survivors Insurance.*

MYERS, Robert J., *Social Security Administration.*

NEWMAN, Samuel C., *Department of Sociology, University of Akron.*

NOTESTEIN, Frank W., *Office of Population Research, Princeton University.*

OGBURN, William F., *Department of Sociology, Florida State University.*

PALMER, Gladys, *University of Pennsylvania Wharton School of Finance and Commerce.*

PARSON, Daniel, *American Gas Association.*

PRICE, Daniel O., *Social Science Statistical Laboratory of University of North Carolina.*

RADKE, G. R., *Illinois Bell Telephone Co.*

RANDALL, Ollie A., *Community Service Society.*

SANDERS, Barkev S., *Bureau of Old-Age and Survivors Insurance.*

SCHILL, Robert E., *The Brooklyn Union Gas Co.*

SCHNEIDER, David M., *Bureau of Research and Statistics, New York State Department of Social Welfare.*

THOMPSON, Warren S., *The John Randolph Haynes and Dora Haynes Foundation.*

VANCE, Rupert B., *Institute for Research in Social Science of University of North Carolina.*

WOLFLE, Dael, *Commission on Human Resources and Advanced Training.*

ZIMMERMAN, Carle C., *Harvard University.*

Panel on census statistics on the labor force

WOLFE, Cedric, *Chairman; Metropolitan Life Insurance Co.*

BARKIN, Solomon, *Textile Workers Union of America.*

GAINSBRUGH, Martin, *National Industrial Conference Board.*

GIVENS, Meredith B., *New York State Division of Placement and Unemployment Insurance.*

MYERS, Howard B., *Committee for Economic Development.*

HENLE, Peter, *American Federation of Labor.*

Panel on agriculture

HAWKINS, Victor, *Chairman; Capper Publications.*
ANDERSON, V. C., *Prairie Farmer.*
ARTHUR, H. B., *Swift & Co.*
BOBERG, W. E., *The Farmer.*
COCKREL, Orvel H., *Watt Publishing Co.*
COLE, Lester, *Montana Farmer-Stockman.*
DAVEY, V. H., *Washington Farmer; Oregon Farmer; Idaho Farmer; Utah Farmer.*
ELLIOTT, F. F., *Bureau of Agricultural Economics, Department of Agriculture.*
HOFFMAN, A. C., *Kraft Foods Co.*
INGALLS, Irving W., *American Agriculturist.*
GORDON, J. B., *The Progressive Farmer.*
KELLOGG, Lester S., *Deere & Co.*
MCKAY, Forbes, *Farm and Ranch.*
MILLER, J. T., *Successful Farming.*
MILLER, K. E., *Armour & Co.*
PIERCE, Richard S., *Wallaces' Farmer; Wisconsin Agriculturist.*
PORTER, Ernest E., *Ohio Farmer; Michigan Farmer; Pennsylvania Farmer.*
RIDOUT, W. J., Jr., *Electricity on the Farm Magazine.*
SAMPNER, J. W., *National Live Stock Producer.*
SEUBERT, Nelson H., *Standard Oil Co.*
SULLIVAN, W. F., *New England Homestead.*
TAYLOR, Henry M., *Department of Agriculture and Immigration of Virginia.*
THOMAS, Harry P., *The Southern Planter.*
TIMMONS, John F., *Iowa State College.*
VORMELKER, Rose L., *Cleveland Public Library.*
WALQUIST, Scherl, *Kansas Farmer; Missouri Ruralist.*
ZACH, Phillip, *Capper Publications.*

Panel on housing and construction

HOADLEY, Walter E., Jr., *Chairman; Armstrong Cork Co.*
COLEMAN, Miles, *Consultant.*
FITZPATRICK, F. Stuart, *Chamber of Commerce of the United States.*
FISHER, Ernest M., *Institute for Urban Land Use and Housing Studies, Columbia University.*
NEWCOMB, Robinson, *Consultant to the President's Council of Economic Advisers.*
SHISHKIN, Boris, *American Federation of Labor.*
WEHRLY, Max S., *The Urban Land Institute.*

Panel on manufactures

FABRICANT, Solomon, *Chairman; National Bureau of Economic Research, Inc.*
HUNT, Stanley, B., *Textile Economics Bureau, Inc.*
KELLOGG, Lester S., *Deere & Co.*
LAWRENCE, P. K., *E. I. du Pont de Nemours & Co.*
RUTTENBERG, Stanley H., *Congress of Industrial Organizations.*

Panel on mobilization statistics

TUPPER, Ernest A., *Chairman; American Can Co.*
HELLBORN, Ludwig S., *General Motors Corp.*
STRINGFIELD, Horace C., *United States Steel Corp.*
VELTFORT, Theodore E., *Copper and Brass Research Association.*
WICKS, Norman, *National Electrical Manufacturers Association.*

*American
Architects
approve*

Panel on mineral industries

EDWARDS, Ford K., *Chairman; National Coal Association.*
ALBRIGHT, Horace M., *U. S. Potash Co., Inc.*
BALL, Max W., *Petroleum and Natural Gas Consultant.*
BUNKER, Arthur H., *Climax Molybdenum Co.*
COWAN, Donald R. G., *University of Michigan.*
MORTON, J. E., *Cornell University.*

Consultants to panel on mineral industries

AMBROSE, Oliver S., *Tide Water Associated Oil Co.*
AXELSON, C. F., *U. S. Gypsum Co.*
BEALL, K. E., *Phillips Petroleum Co.*
BOYD, J. R., *National Crushed Stone Association.*
BROWN, James V., *National Petroleum Council.*
BURT, A. W., *Standard Oil Co. (New Jersey).*
CADLE, Austin, *Standard Oil Co. of California.*
CHEDSEY, Wm. R., *College of Engineering, University of Illinois.*
CONOVER, Julian D., *American Mining Congress.*
CRONMILLER, G. F., Jr., *Harbison-Walker Refractories Co.*
DAVIS, R. L., *Perlite Institute.*
DEAN, Roy E., *Ayrshire Collieries Corp.*
DELARGEY, R. J., *Westraco Chemical Division of Food Machinery & Chemical Corp.*
DICE, M. E., *General Petroleum Corp.*
DURRETT, T. J., Jr., *The Georgia Marble Co.*
EARNEST, F. W., Jr., *Anthracite Institute.*
ECKERT, R. R., *American Bureau of Metal Statistics.*
ELSTAD, R. T., *Oliver Iron Mining.*
FORRESTER, J. D., *School of Mines and Metallurgy of University of Missouri.*
GENT, Ernest V., *American Zinc Institute.*
GONZALEZ, Richard J., *Humble Oil & Refining Co.*
HALL, Noble, *Atlantic Refining Co.*
HEINRICHS, C. E., *Virginia-Carolina Chemical Corp.*
INTO, A., Norman, *International Minerals & Chemical Corp.*
JAMESON, Minor S., Jr., *Independent Petroleum Association of America.*
JENKINS, Robert R., *Continental Oil Co.*
JURENEV, Serge B., *Continental Oil Co.*
KNIGHT, E. T., *Atlantic Refining Co.*
KOECHLEIN, Fred A., *International Minerals & Chemical Corp.*
KRASE, N. W., *E. I. du Pont de Nemours & Co.*
LAMB, G. A., *Pittsburgh Consolidation Coal Co., Inc.*
LANDA, Maynard I., *Cities Service Co.*
LEE, H. C., *Basic Refractories Inc.*
LUND, W. R., *Warren Petroleum Corp.*
MADDEN, Frank J., *Salt Producers Association.*
McINTOSH, Albert J., *Socony-Vacuum Oil Co.*
McLAUGHLIN, Donald H., *Homestake Mining Co.*
MONTAGUE, S. A., *Spruce Pine Mica Co.*
MONTGOMERY, Gill, *Minerva Oil Co.*
MULRYAN, Henry, *Sierra Tale & Clay Co.*
MUMFORD, R. W., *American Potash & Chemical Corp.*
PARDEE, Franklin G., *The Lake Superior Iron Ore Association.*
PARKER, Charles F., *Union Oil Company of California.*
PARKER, Charles M., *American Iron & Steel Institute.*

PEACOCK, H. G., *United States Smelting Refining and Mining Co.*
PERKINS, E. F., *Gulf Oil Corp.*
PITCAIRN, R. A., *Island Creek Coal Sales Co.*
RICE, Dorothea M., *The American Metal Co., Ltd.*
RIDGE, John D., *The Pennsylvania State College School of Mineral Industries.*
SCHWALL, Henry, *Shell Oil Co.*
SEUBERT, Nelson H., *Standard Oil Co. (New Jersey).*
SKINNER, C. E., *Gulf Oil Corp.*
SIGNER, M. I., *Colorado School of Mines.*
STRAUSS, Simon D., *American Smelting & Refining Co.*
VAIL, Robert C., *Morton Salt Co.*
VAN COVERN, Fred, *American Petroleum Institute.*
VOSKUIL, Walter H., *Illinois State Geological Survey Division.*
WILLISTON, S. H., *Cordero Mining Co.*
YOUNG, John W., *United States Steel Corp.*
ZIEGFELD, Robert L., *Lead Industries Association.*

Panel on business (wholesale, retail, and service trades)

HUGHES, Gordon, *Chairman; General Mills, Inc.*

Consultants to panel on business

BENGSTON, R., *Green Giant Co.*
BERGIN, P. B., *Retail Jewelers Tax Committee, Inc.*
BOBERG, W. E., *The Farmer.*
BROWN, R., *Waterbury Chamber of Commerce.*
CERNY, G. B., *Midland Cooperative Wholesale.*
COLT, G. T., *Torrington Chamber of Commerce.*
CRANE, W. M. Jr., *The American Brass Co.*
CRONK, A. D., *The Patent Button Co.*
DEARMAN, C. R., *Bristol Co.*
DETLEFSEN, G. R., *Pillsbury Mills, Inc.*
DONNELLY, M. E., *Minnesota Mining & Manufacturing.*
DRAKE, L. A., *Philadelphia Chamber of Commerce.*
FERNALD, R. O., *National Lead Co.*
FOLLETT, E., *Archer Daniels Midland Co.*
GAGHAN, R. J., *Society for Savings.*
GAMBLE, F. R., *American Association of Advertising Agencies.*
GEDDES, H. H., *R. L. Polk & Co.*
GIRDNER, W., *Melville Shoe Corp.*
GOLDISH, S., *Minneapolis Star & Tribune.*
GRIMES, A. R., *Campbell Mithun, Inc.*
HASTINGS, C. R., *General Motors Corp.*
HILLS, C. E., *Connecticut State Highway Division.*
HUBBARD, A. W., *Modern Medicine.*
LAVIDGE, R. J., *Elrick, Lavidge & Co.*
LEWIS, E. H., *University of Minnesota.*
MASON, J. W., *Wilson, Haight, Welch & Grover.*
McMILLAN, S. C., *University of Connecticut.*
MERAS, J. E., *The Stanley Works.*
MEYERS, P. H., *Allied Stores Corp.*
PINKERTON, W. S., *The Dayton Co.*
PROTHERO, S. H., *Norwalk Chamber of Commerce.*
RUSSELL, R. W., *Packard Motor Car Co.*
SHAPIRO, M., *Waterbury Tool Division of Vickers, Inc.*
SHEPHERD, J. E., *Fletcher D. Richards, Inc.*

SINGLETON, N., *Edward Graceman & Associates.*
SMITH, H., Jr., *Middletown Chamber of Commerce.*
SONNECKEN, E. H., *Ford Motor Co.*
THORNTON, S. K., *Scovill Manufacturing Co.*
TIFT, O. H., *Wico Electric Co.*
WALLACE, A. E., *Connecticut Light & Power Co.*
WHITESIDE, H. O., *Mercantile Trust Co.*
ZERBY, P. E., *Rapinwaæ Paper Co.*

Panel on transportation

OWEN, Wilfred, *Chairman; Brookings Institution.*
ADAMS, J. W., *Federal Trade Commission.*
AITCHISON, Beatrice, *Post Office Department.*
BARTON, Frank L., *General Services Administration.*
BOWLING, Chas. B., *Production and Marketing Administration, Department of Agriculture.*
BROWN, Andrew H., *National Industrial Traffic League.*
BROWN, P. W., *Sears, Roebuck & Co.*
BUTLER, Arthur C., *National Highway Users Conference.*
CAMP, Glen D., *Melpar, Inc.*
CAMPBELL, M. Earl, *Highway Research Board.*
CONNELLY, W. A. C., *Corps of Engineers, United States Army.*
CREIGHTON, Basil R., *American Association of Motor Vehicle Administrators.*
DAVIS, Harmer E., *Institute of Transportation and Traffic Engineering, University of California.*
DEARING, Charles L., *Deputy Under Secretary for Transportation, Department of Commerce.*
FAIRBANK, H. S., *Bureau of Public Roads.*
FREDERICK, John H., *University of Maryland.*
FUSSELL, R. H., *Business and Defense Services Administration, Department of Commerce.*
HAMMOND, Harold, *Chamber of Commerce of the United States.*
HILL, Arthur M., *National Association of Motor Bus Operators.*
HOLLAR, Philip A., *Association of American Railroads.*
HULSE, John B., *Truck Trailer Manufacturers Association.*
KELLY, H. H., *Department of State Inland Transport Policy Staff.*
KNUDSON, James K., *Defense Transport Administration.*
LACEY, Edward F., *The Transportation Council for the Department of Commerce.*
LADD, Boyd, *Operations Research Office, Johns Hopkins University.*
LESANSKY, William A., *Office of Chief of Transportation, Department of Army.*
LINDMAN, Bertram H., *Operations Research Office, Johns Hopkins University.*
MANN, James D., *National Council of Private Motor Truck Owners, Inc.*
MATHER, A. F., *Agricultural Council of California.*
McGANN, Paul W., *Bureau of Mines, Department of the Interior.*
MORRIS, Mark, *Iowa State Highway Commission.*
PEARSON, O. P., *Automobile Manufacturers Association.*
PLOWMAN, E. G., *United States Steel Corp.*
REED, Harold T., *Line Material Co.*
ROBINSON, Myles E., *Air Transport Association of America.*
SAUNDERS, William B., *Transportation Consultant.*
SIEDLE, E. G., *Armstrong Cork Co.*
SMITH, Wilbur S., *Bureau of Highway Traffic, Yale University.*

STEVENS, W. H. S., *Interstate Commerce Commission.*
STIER, Howard L., *National Cannery Association.*
TOBIN, T. J., *Erie Railroad Co.*
TURNER, John R., *Washington, D. C.*
ULLMAN, Edward L., *Department of Geography, University of Washington.*
WILLIAMS, Ernest W., *Graduate School of Business, Columbia University.*
WINTER, J. C., *Production and Marketing Administration, Department of Agriculture.*
WYLIE, Robt. H., *American Association of Port Authorities.*

Panel on foreign trade

McINTYRE, Francis, *Chairman; California Texas Oil Co., Ltd.*
BUDD, Burton, *Packard Motors Export Division.*
JOHNSON, Norris, *National City Bank of New York.*
RIDGEWAY, George, *International Business Machines Co.*

Panel on State and local governments

BANE, Frank, *Chairman; Council of State Governments.*
BLUCHER, Walter, *American Society of Planning Officials.*
CHATTERS, Carl H., *American Municipal Association.*
CLARK, Joseph F., *Municipal Finance Officers Association.*
CONLON, Charles F., *Federation of Tax Administrators.*
GAZZOLO, Dorothy, *National Association of Housing Officials.*
RIDLEY, Clarence E., *International City Managers' Association.*

LIST 3. ORGANIZATIONS CONDUCTING SURVEYS ON BEHALF OF THE INTENSIVE REVIEW COMMITTEE

American Marketing Association

The American Marketing Association survey was conducted under the leadership of Dr. Neil H. Borden, President of the Association and Professor of Advertising, Graduate School of Business Administration, Harvard University. Presentation of the results of the survey was made before the Committee on November 19, 1953, by Dr. Borden and Mr. Charles W. Smith of McKinsey & Company, Treasurer of the Association.

Chamber of Commerce of the United States and National Industrial Council

The survey of trade association uses of census materials was made under the leadership of Mr. Charles M. Mortensen, Manager of the Trade Association Department of the Chamber of Commerce of the United States, and Mr. R. T. Compton, Executive Director of the National Industrial Council. The presentation before the Committee was made on November 20, 1953, by Mr. Compton and by Dr. R. Buford Brandis, Secretary of the Committee on Business Statistics of the Chamber of Commerce of the United States, acting in Mr. Mortensen's absence.

The survey of State Chambers of Commerce was conducted by Mr. George Mascott, Manager, State Chamber of Commerce Department of the Chamber of Commerce of the United States. The presentation before the Committee was made on November 20, 1953, by Dr. R. Buford Brandis.

**LIST 4. ORGANIZATIONS SURVEYED BY THE INTENSIVE REVIEW
COMMITTEE**

Agricultural organizations

*American Farm Bureau Federation.....	Kline, Allan B.
*American Farm Economic Association.....	Butz, Earl L.
National Association of Commissioners, Secretaries and Directors of Agriculture.	
*National Council of Farmer Cooperatives.....	Riggle, John J.
National Farmers Union	
*National Grange.....	Halvorson, Lloyd Sanders, J. T.

Business and financial groups

Advertising Federation of America	
*Agricultural Publishers Association.....	Boberg, W. E.
*American Agricultural Editors Association.....	Neal, Dewey H.
	Matlick, J. O.
	Deering, Ferdie
*American Retail Federation.....	Jones, Rowland, Jr.
*Association of National Advertisers, Inc.....	Allport, Peter W.
Chamber of Commerce of the United States :	
*Committee on Business Statistics.....	Brandis, R. Buford
	Pettibone, Holman D.
*Distribution Committee.....	Nichols, Charles G.
*Committee for Economic Development.....	Myers, Howard B.
*Institute of Life Insurance.....	Holran, Mrs. Virginia.
Investment Bankers Association of America	
National Association of Life Underwriters	
*National Association of Manufacturers, Distribution Committee.	Foy, Fred C.
*National Association of Purchasing Agents.....	Renard, G. A.
National Association of Real Estate Boards	
National Association of Securities Dealers	
National Cotton Council of America	
*National Distribution Council.....	Motley, Arthur H.
National Federation of Financial Analysts Societies :	
*Investment Analysts Society of Chicago....	Biggert, Philip C.
*Cleveland Society of Security Analysts.....	McNelly, E. W.
*Dallas Association of Investment Analysts.	Cleaver, James S.
*Financial Analysts of Philadelphia.....	Coltman, Robert.
National Foreign Trade Council	
*National Industrial Conference Board.....	Gainsbrugh, Martin R.
*National Reclamation Association.....	Welsh, William E.
*National Small Business Men's Association.....	Emery, DeWit.

Federal Reserve banks

*Atlanta.....	Taylor, Charles T.
*Boston.....	Ellis, George H.
*Chicago.....	Mitchell, George W.
*Cleveland.....	Cutler, Addison T.
*Dallas.....	Irons, Watrous H.
*Kansas City.....	Tow, Clarence W.

See footnote at end of list.

*Minneapolis.....	Peterson, J. Marvin.
*New York.....	Roosa, R. V.
*Philadelphia.....	Snader, K. M.
*Richmond.....	Storrs, Thomas I.
*St. Louis.....	Abbott, Wm. J., Jr.
*San Francisco.....	Wheeler, O. P.

Labor organizations

*American Federation of Labor.....	Meany, George.
*Congress of Industrial Organizations.....	Reuther, Walter P.
	Ruttenberg, Stanley H.
*Railway Labor Executives Association.....	Leighty, G. E.
United Mine Workers of America	

Professional and advisory groups

*American Association for Public Opinion Research.	Fiske, Marjorie.
*American Association for the Advancement of Science.	Nelson, Lowry.
*American Association of Collegiate Schools of Business.	Carroll, Thomas H.
*American Economic Association.....	Bell, James Washington.
*American Hospital Association.....	Norby, Maurice J.
American Library Association	
*American Medical Association.....	Bradley, Charles E.
*American Political Science Association.....	Hechler, Kenneth.
*American Public Health Association.....	Atwater, Reginald M.
*American Sociological Society, Committee on Social Statistics.	Shryock, Henry S., Jr.
	Riley, John W., Jr.
*American Statistical Association, Committee on Census Enumeration Areas.	Green, Howard Whipple.
*Associated University Bureaus of Business and Economic Research.	Boothe, Viva.
*Brookings Institution.....	Hastings, Delbert C.
*Census Advisory Committee of the American Historical Association and the Mississippi Valley Historical Association.	Calkins, Robert D.
	Ander, O. Fritiof.
*Census Advisory Committee of the American Marketing Association.	Whiteside, Henry O.
*Census Advisory Committee of the American Political Science Association.	Holcombe, Arthur N.
*Census Advisory Committee of the American Statistical Association.	Stephan, Frederick F.
Cowles Commission for Research and Economics	
*Food Research Institute, Stanford University....	Bennett, M. K.
*Institute for Research in Social Science, University of North Carolina.	Blackwell, Gordon W.
Institute for Social Research, University of Michigan.	
*Legislative Reference Service, the Library of Congress.	Griffith, Ernest S.
*Milbank Memorial Fund.....	Boudreau, Frank G.
National Bureau of Economic Research	

See footnote at end of list.

*National Planning Association.....	Colm, Gerhard.
National Opinion Research Center	
*Office of Population Research, Princeton Univ....	Notestein, Frank W.
*Office of Population Research, University of Washington.	Schmid, Calvin F.
*Scripps Foundation for Research in Population Problems.	Whelpton, P. K.
*Social Science Research Council.....	Herring, Pendleton.
Special Libraries Association	
*Statistical Laboratory, Iowa State College of Agriculture and Mechanic Arts.	Bancroft, T. A.
*Statistical Laboratory, University of Florida....	Callander, W. F.
*Twentieth Century Fund.....	Dewhurst, J. Frederic.

State and local government groups

*American Municipal Association.....	Chatters, Carl H.
*Census Bureau Advisory Committee on State and Local Government Statistics..	Gray, Welles A.
Council of State Governments	
*International City Managers' Association.....	Ridley, Clarence E.
Municipal Finance Officers Association	
*National Association of County Officials.....	Seegmiller, Keith L.
*National Association of Marketing Officials.....	Meek, J. H.
*National Association of Tax Administrators.....	Conlon, Charles F.
*National Municipal League.....	Willoughby, Alfred
*National Tax Association.....	Welch, Ronald B.
*Tax Foundation.....	Miller, Herbert J.
Tax Institute, Inc.	
*United States Conference of Mayors.....	Bettors, Paul V.

Other

National Rivers and Harbors Congress.
New England Council.

*Indicates response received.

LIST 5. OTHER ORGANIZATIONS COMMUNICATING WITH THE INTENSIVE REVIEW COMMITTEE

American Cutlery Manufacturers Association....	Bement, Lewis D.
American Gas Association.....	Parson, Daniel.
Armco Steel Corp.....	Anderson, John T.
Association of American Soap & Glycerine Producers, Inc.	Pattison, E. Scott.
Association of the Statisticians of American Religious Bodies.	Edmunds, J. P.
Bakers Weekly.....	Joyce, Arthur T.
Elgin National Watch Co.....	Myer, C. Randolph.
Fire Association of Philadelphia.....	Blake, J. Howard.
General Chemical Division, Allied Chemical & Dye Corp.	Vogel, P. A.
Geyer Advertising, Inc.....	Frank, Nathalie D.

Journal of Commerce.....	Luedicke, H. E.
Municipal Court of Philadelphia.....	Monohan, Thomas P.
National Coat and Suit Industry Recovery Board...	Batchker, Joseph L.
National Confectioners' Association.....	Gott, Philip P.
National Knitted Outerwear Association.....	Korzenik, Sidney S.
Radio Corporation of America, RCA International Division.	Melas, L. C.
Geo. D. Roper Corp.....	Hobson, S. H.
F. B. Todd & Co.....	Todd, R. Beaman.
United States Steel Corp.....	Stringfield, H. C.
Wool Bureau.....	Jackendoff, Ruth.

LIST 6. WITNESSES FROM OTHER FEDERAL AGENCIES APPEARING BEFORE THE INTENSIVE REVIEW COMMITTEE

Outside the Department of Commerce

- Agricultural Marketing Service, Department of Agriculture:
Oris V. Wells, *Chief*.
- Board of Governors of the Federal Reserve System:
Ralph A. Young, *Director, Division of Research and Statistics*.
- Bureau of Labor Statistics, Department of Labor:
Ewan Clague, *Commissioner*.
Aryness Joy Wickens, *Deputy Commissioner*.
- Bureau of Mines, Department of Interior:
Thomas H. Miller, *Assistant Director*.
Paul McGann, *Acting Chief Economist*.
- Bureau of Old-Age and Survivors Insurance, Social Security Administration, Department of Health, Education, and Welfare:
Arthur E. Hess, *Deputy Assistant Director, Division of Program Analysis*.
William H. Cummins, *Chief, Classification and Coding Branch*.
Benjamin J. Mandel, *Chief, Statistics Branch*.
- Council of Economic Advisers, Executive Office of the President:
Arthur F. Burns, *Chairman*.
- Federal Trade Commission:
Edward F. Howrey, *Chairman*.
John W. Adams, *Economic Analyst*.
William Levin, *Chief, Division of Financial Reports*.
David C. Murchison, *Assistant to the Chairman*.
- Housing and Home Finance Agency:
Carter McFarland, *Director of Operations Analysis*.
E. Everett Ashley, *Chief, Housing Economics Branch, Division of Housing Research*.
- Internal Revenue Service, U. S. Treasury Department:
T. C. Atkeson, *Assistant Commissioner*.
- Joint Committee on the Economic Report, Congress of the United States:
Grover W. Ensley, *Staff Director*.
John W. Lehman, *Clerk of the Committee*.
- National Office of Vital Statistics, Public Health Service, Department of Health, Education, and Welfare:
Robert D. Grove, *Deputy Chief*.
- United States Tariff Commission:
Louis S. Ballif, *Chief, Technical Service*.

Department of Commerce

Bureau of Foreign Commerce:

Loring K. Macy, *Director*.

Carl P. Blackwell, *Director, International Economic Analysis Division*.

Business and Defense Services Administration:

Horace B. McCoy, *Deputy Administrator*.

Office of Business Economics:

M. Joseph Meehan, *Director*.

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