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IMPROVED STATISTICS FOR
ECONOMIC GROWTH

COMMENTS BY GOVERNMENT AGENCIES ON VIEWS

SUBMITTED TO THE

SUBCOMMITTEE ON ECONOMIC STATISTICS

OF THE

JOINT ECONOMIC COMMITTEE
CONGRESS OF THE UNITED STATES



MARCH 1966

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LETTERS OF TRANSMITTAL

March 10, 1966.

To the Members of the Joint Economic Committee:

Transmitted herewith for the use of the Joint Economic Committee, other Members of Congress, and the general public, are the comments of various Government statistical agencies on the suggestions and criticisms contained in the compendium entitled "Improved Statistics for Economic Growth."

These comments do not necessarily reflect the views of the committee or any of its members.

WRIGHT PATMAN,
Chairman, Joint Economic Committee.

March 8, 1966.

HON. WRIGHT PATMAN,
*Chairman, Joint Economic Committee,
U.S. Congress, Washington, D.C.*

DEAR MR. CHAIRMAN: Transmitted herewith is a compilation of comments by various Government statistical agencies on the suggestions and criticisms contained in the compendium of comments received by our Subcommittee on Economic Statistics from statistical experts and statistics users entitled "Improved Statistics for Economic Growth."

As a further step in our study of the statistical requirements of the Nation in the light of present and future needs and capabilities, the subcommittee requested the Office of Statistical Standards of the Bureau of the Budget to make a thorough and detailed examination of the statements included in that compendium. The Office of Statistical Standards in turn has asked the various departmental agencies responsible for the preparation of statistics for their views. The compilation contains the replies of the agencies commenting on specific recommendations made by the contributors, noting the progress that has already been made and the problems involved in implementing some of the proposals. The views of the Council of Economic Advisers give emphasis to certain data needs important for the determination and evaluation of public and private economic policy. The agency comments were submitted independently of one another and should not be regarded as a unified or endorsed expression of a statistical program.

In his letter of transmittal, Dr. Raymond T. Bowman, Assistant Director of the Office of Statistical Standards, tries to provide an overview by stating what he believes to be a central theme running through the comments of the experts and users that "Underlying most of the recommendations there is recognition, implicitly or explicitly, of the need to improve the organization of statistical data so that it can be more effectively used in analysis and policy."

I believe these views will be extremely valuable to the committee, the subcommittee, other Members of Congress, and the general public. This is not to imply, however, that anything contained in these papers necessarily reflects the views of the subcommittee or its members.

WILLIAM PROXMIRE,
Chairman, Subcommittee on Economic Statistics.

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Comments by **RAYMOND T. BOWMAN**
Assistant Director for Statistical Standards
Bureau of the Budget

ON

IMPROVED STATISTICS FOR ECONOMIC GROWTH

[A compendium of views submitted to the
Joint Economic Committee's
Subcommittee on Economic Statistics]

EXECUTIVE OFFICE OF THE PRESIDENT,
BUREAU OF THE BUDGET,
Washington, D.C., December 8, 1965.

HON. WILLIAM PROXMIRE,
*Chairman, Subcommittee on Economic Statistics,
Joint Economic Committee, U.S. Senate,
Washington, D.C.*

DEAR SENATOR PROXMIRE: We welcome the opportunity to respond to your letter of July 16, 1965, requesting comments on the compendium of views and suggestions for improvement of statistics for economic growth submitted by social scientists and statisticians to the Joint Economic Committee. We also appreciate the opportunity which your request has provided for obtaining the views of the statistical agencies and including them with our comments.

The replies of the agencies, which are attached, comment on specific recommendations in the compendium, noting the progress that has already been made on some proposals, and the problems that are involved in the implementation of other proposals. In the reply of the Council of Economic Advisers emphasis is given to certain data needs important for the determination and evaluation of public and private economic policy. The agency comments have been submitted independently of one another. They should not be regarded as a unified or endorsed expression of a statistical program. At certain points in my reply, however, I refer briefly to the agency comments, for illustrative purposes.

In my statement I have not attempted to comment on the individual proposals. Instead I have tried to provide an overview by stating what I believe to be a central theme of the compendium. Underlying most of the recommendations there is recognition, implicitly or explicitly, of the need to improve the organization of statistical data so that it can be more effectively used in analysis and policy. Recommendations such as those stressing the need for much greater geographic detail, or suggestions for more timely and frequent availability of large bodies of information, or the need for more longitudinal studies, or systematic integration of major systems of data, or a national statistical data center—all such major recommendations imply fundamental and far-reaching consequences for the organization of statistical data generally and for the statistical responsibilities of the Federal agencies.

I believe, therefore, that I can be of most service to the Joint Economic Committee at this time by placing emphasis on the need for an improved system of statistical activities and information, and on major steps that might be taken toward such improvement.

Placing emphasis on the overall design of the body of Federal statistics enables us to see the important gaps or needs for particular facts or series in more meaningful perspective and in relation to inter-related objectives.

NEED FOR AN IMPROVED SYSTEM OF INFORMATION

The need for an improved system of statistical information has been heightened by two major developments. These are, first, the wide-ranging nature of analysis and policy which has increasingly crossed the lines of the traditional disciplines and, second, the accelerated improvement and use of the computer.

When we fully recognize the significance of these two circumstances we can see why our present Federal statistical system, which is probably the best in the world, is not good enough.

Analysis of and policy concern for the performance and prospects of society have gone well beyond strictly economic considerations and multiplied the number of issues faster than our ability adequately to evaluate them. Such areas of inquiry as the changing nature of population expansion; the relation between education and economic growth; the motivations to enter or leave the labor force; the interplay between prices, productivity, and wages; the impact of economic changes on particular groups and communities; the increasing statistical study of disease; the research underpinnings for policy in the areas of transportation and urbanization—all of these and many more have both widened and intensified the scope of inquiry.

The complex interplay of such wide-ranging questions involves identification in many dimensions of individuals, groups, firms, administrative units, and communities—and their changes over time. This has greatly multiplied the technical requirements for consistency of data which will permit the appropriate analytical manipulations.

Rapidly developing computer technology and systems analysis promises a vastly improved base from which to resolve the problem of analytical arrangements. But to provide consistent and accurate information which can be linked together effectively, to make certain that our major frameworks and models are reliably constructed to guide the collection and analysis of such data and to provide the efficient flow of data to meet regular and special demands will require considerably more resources, both in human talent and money, than are now available. If the providing of such resources is to be truly productive, an improved organization and coordination of our information system will be required. What are the important requirements?

GENERAL REQUIREMENTS FOR IMPROVED DESIGN OF INFORMATION

We all would agree that many elements of information need to be used in a systematic way. Policy decisions or general analysis cannot usually depend on a single fact, a particular series, or even a single model. Moreover, even with a multiplicity of information, effective uses of data require that the data be related in meaningful ways and that the flow of such information be flexible enough to meet regular and special demands.

The foregoing indicates that two general aspects of a system of information are needed.

One aspect is concerned with the conceptual structure of information. This aspect requires that the data elements be significant, consistent, accurate, and complete.

The other aspect of a system of information deals with the mechanics of data availability, which requires that the flow of data be suitably frequent and prompt, and presented in efficient formats.

The former aspect would require, for example, that in the analysis of productivity, prices, and wages, the needed data on employment, output, prices, profits, and capital come from reasonably consistent sources and be easily brought together for combined study in an operational model. That these elements are not easily related in practice is in part a failure of Federal statistical programs to meet the conceptual standards for systematic analysis.

Improvement in the latter aspect of data availability is needed in order to meet the changing analytical requirements which regular publication formats and publication schedules are less able to satisfy. The regular publications of the Current Population Survey, for example, cannot adequately meet the needs of specialized analysis requiring answers to such questions as to why people enter or leave the labor force, or how the size distribution of income may be affected by different sources of income, or how education, age, and income are related. Such analyses, which must go below the level of the published reports, and which must tie in with other sources of information, or require new information, are increasing in importance. This means that we must take fuller advantage of existing techniques to extend the ability of the information system to supply data through channels other than the traditionally published reports.

These two aspects—appropriate conceptual structure and efficient data flow—should be improved.

How can we achieve this improvement?

MAJOR ELEMENTS FOR IMPROVED ORGANIZATION OF FEDERAL STATISTICAL ACTIVITIES

This is, of course, not the occasion to blueprint all steps toward a fully coordinated system of information. Some of these steps, however, are timely and appropriate and are highlighted to help illustrate those areas in which coordination problems and needs are acute and where their resolution appears promising.

By way of summary, I wish to highlight the following instruments for organization and coordination which will require important action in the months and years ahead:

1. A national statistical data center.
2. A coordinated system of Federal, State, and local statistics.
3. A coordinated program of social statistics.
4. A Federal directory of business establishments.
5. Improved industrial, occupational, and geographic classification.
6. Improved coordination based on national economic accounts and models of the behavior of the economy, the educational system, etc.

1. A national statistical data center

The White House has announced the formation of a task force to advise the Budget Bureau on the nature and responsibilities of a national statistical data center.

This action was taken in recognition of the need for greatly improved accessibility to and coordinated use of statistics collected by the Federal Government. More coordinated use of computer facilities is now required for (a) storing information collected by several agencies;

(b) making these data speedily accessible; and (c) providing interrelated sets of information for analysis. Such requirements stem from the complexity and wide-ranging nature of analyses and policy, some of which were mentioned above in the areas of economic growth, poverty, education, health, and urbanization.

Having the data properly filed, collated, and efficiently accessible will make possible a considerable improvement in the analytical use of existing records. Such a service, which is now a burden to agencies presently geared mainly to putting out regularly published reports, could be the specialized function of the data center.

Work is going forward in various agencies (see particularly the replies of Census, BLS, and IRS) to make tapes available for research needs. The increased need for such information, however, is imposing a burden on individual agencies to meet requests. This burden is intensified, moreover, because these special needs for data in machine-readable form increasingly require collation with other data (example, IRS with Census); increasingly run into disclosure problems (example, data for individual manufacturing establishments); and increasingly require special tabulations rather than raw data on tapes. The combination of these specialized requirements, often cutting across agency lines, strongly argues for a central service rather than one in each agency.

But numerous problems need to be considered, some of which are mentioned in the Census Bureau reply. The formation of the committee announced by the White House will advise on the feasibility of a center, on types of data the center would assemble, and on the nature of its services.

2. *A coordinated system of Federal, State, and local statistics*

Among the most frequent proposals in the compendium were recommendations for more detailed and frequent data for State and local areas. This demand has been increasing over the last three decades and has sharply increased during the past 10 years.

In recognition of the new objectives of social policy and the data needs of social scientists, efforts have been made in recent years to expand on a selective basis the geographic detail in important current Federal series. Examples are the data on retail trade, population, and personal income by SMSA's as well as the statistics by county now being provided each year showing employment and wages for OASI-covered employees. The possibility of making annual estimates of population and income by county, using IRS data, is being tested, as mentioned in the Census and IRS replies. Resources have been provided to the Census Bureau and to other Federal agencies to supply an advisory service to State and local governments on methods of making valid local estimates consistent with existing measures for larger geographic areas.

Recent Federal legislation is directly responsible for an increased use of local area data. For example, the Economic Opportunity Act and the Elementary and Secondary Education Acts involve direct Federal aids to communities based on formulas which require data on the number of children in families with incomes below given amounts. Local area data are also required by communities to establish eligibility under a number of acts; e.g., unemployment under the Economic Development Act; population, employment by industry

and "income-consumption patterns" for urban areas of 50,000 or more population under the Federal-Aid Highway Act program; and data related to community renewal plans as a condition of assistance through Federal grants for urban renewal. Both the Highway Act and the Housing Act provide for making funds available to localities for planning purposes.

The number of Federal programs now requiring local data or calling for the assembly of local data by communities, places a high premium on the adoption of standards to insure comparability in the data collected or assembled at local levels, on the development of effective restraints on the range of data called for, and on the establishment of procedures which will encourage maximum exchange of data among various types of users.

We must take steps (a) to insure that standards are consistently applied to federally sponsored collections of data by local communities; (b) to develop and promote the use of adequate estimating procedures by local governmental units; (c) to encourage in OBE or other appropriate agencies the assembly and analysis of existing data dealing with regional and local economic characteristics using definitions, classifications, and frameworks that are consistent with the national economic accounts; (d) to insure effective review and coordination of those provisions of proposed legislation which call for a data base of specified types of information.

A closely related problem in supplying local area data is one of statistical coordination between the Federal, State, and local governments. Except for specialized programs, generally under conditions of Federal subsidy, no organization exists to coordinate the statistical programs of Federal, State, and local governments. The U.N. organization for international statistics program coordination is clearly superior to the intergovernmental organization for statistical coordination in the United States.

I have made some suggestions to the Governors' Conference with respect to the initiation of an intergovernmental program of statistical coordination in the United States. The long-range objective of my proposal is the establishment of a coordinated intergovernmental statistical system in the United States. As a first step toward this objective, I proposed to the Governors' Conference an annual conference of Federal-State statisticians. Such a conference, if established, would require careful staff preparation. It should not supersede the specialized conference arrangements (e.g., State labor statisticians, State agriculture statisticians, etc.) now existing in connection with operating programs, but should be at a much broader and less operationally oriented level. I have also proposed better organization within each State to provide an appropriate center of contact.

The purpose of a conference of State and Federal statisticians would be to develop statistical standards dealing with definitions and methodology and to promote their adoption and use.

The problems of coordination involved in generating and supplying local area data are immense, and will require considerable attention by this Office and by all agencies concerned with the problem.

In part this coordination will involve improving upon existing arrangements (e.g., technical assistance by Census on local population estimates, Federal-State-local cooperation in collection of employment statistics) but in good part it may require a major new extension

of the statistical organization of the Nation—State and local as well as Federal.

3. *A coordinated program of social statistics*

One of the striking features of the statistical program in recent years has been its progressive extension into a greater number of social areas.

While this extension properly recognizes the new dimensions of social inquiry and concern, the demand for new statistics creates considerable problems of organization.

In part, new statistics have resulted from reports of program operations, but more importantly, increased emphasis has been placed on covering new areas of social concern with general-purpose series.

The National Health Survey program is an outstanding example of the latter. In other areas, such as population statistics, which have traditionally been collected at decade intervals, demands for more frequent data as well as for more relevant details are growing.

In many of these areas, statistics based on family or household units are of greatest significance. Many items of information are common to all interests—age and sex of family members, size of household, income, socioeconomic status, for example. As a result, it has been expedient to add supplementary inquiries to the Current Population Survey (the monthly household survey conducted by the Bureau of the Census primarily to obtain current estimates of national employment and unemployment).

In the near future we will have to resolve the following problems:

(a) Further loading of existing samples as a trade-off with establishing additional ones.

(b) Developing current data of new types—e.g., consumer expenditures surveys, and information on crime and delinquency.

(c) Linking administrative records and other reporting systems—e.g., social security data, tax data, birth and death data, and school records to get added information, more accurate information, or reduce burden.

(d) Accuracy of information obtained from households on certain subjects, such as income and savings, and the limitations which response error puts upon microanalysis.

(e) How to conduct and analyze longitudinal studies, which are of growing interest in studying and evaluating effects of a variety of government programs. The problems of response error, sample attrition, and maintaining identification of respondents from one interview to another, which are acute in panel-type surveys, need to be continually evaluated.

(f) Finally, but perhaps most fundamentally, the increasing need to provide basic data and techniques for appraising the effectiveness of social programs.

4. *A Federal directory of business establishments*

There has been a long-standing need to have a coordinated file of all U.S. business enterprises. In the absence of such a master file at the disposal of all official fact-gathering agencies, varied requests for information have been uncoordinated and have placed unnecessary burdens on respondents, on producers of information, and on users.

A major coordinating instrument would be a directory of firms and establishments showing the name, address, industrial classification, employer identification number, and employee size of establishment.

It would be a central file, available to statistical agencies, from which efficient samples could be drawn for varied but related purposes. It would prevent unnecessary duplication of requests, make effective uniform industrial classifications, so vital in eliminating inconsistencies in classification of employment data, for example, and help supply the needed links between establishments and enterprises for collation of related information (employment, wages, profits, output, etc.).

While there are obstacles standing in the way of establishing such a directory, we feel that a fresh view should now be taken and recognition given to the immense advantages which such an instrument would provide.

5. Improved industrial, occupational, and geographic classification

There were several proposals in the compendium for improving industrial, occupational, and geographic classification.

Industrial classification at the establishment level has developed considerably under the leadership of the Budget Bureau. Improvements to take into account development of new products, and of processes to make existing products are continually studied, in part through a technical committee on industrial classification. Care must be taken to maintain a proper balance between the needs for continuity with the past and keeping abreast of new developments.

Beyond the establishment level of classification which concerns itself with industry categories, interest is widening in other modes of classification more suitable to the enterprise (particularly in connection with financial transactions) and also more suitable to final demand categories (e.g., end-use classifications of products).

Additional work is contemplated in this area.

The situation with regard to the classification of occupations is much more difficult than with industries. Unlike industries, a single standard classification for occupations has never been adopted. One major system is that used for statistical purposes by the Bureau of the Census; another is that used by the Federal-State employment system in job placement, counseling and guidance work, formalized in the Dictionary of Occupational Titles, recently revised. In addition to these two most widely used systems, others have been developed for particular purposes—for statistics of wage rates, to classify scientists and engineers, to establish standards for hiring and promoting Federal employees, etc.

The Bureau of the Budget recognizes that information on the occupational characteristics of the labor force is becoming more and more important, and that the development of a single standard classification would be extremely useful, if feasible. As an alternative, some method for converting from one system to another at reasonable levels of detail should be developed. At the same time, methods of collecting occupational data should be reexamined and improved where possible. We have started a project to investigate these problems, with the aid of a consultant and an advisory committee representing the Federal agencies most concerned. As the work progresses, users of the information outside the Federal Government will also be consulted. The desirability of international comparability will also be considered.

The proliferation of interest in small area data (States, cities, SMSA's, counties) has had considerable significance for the responsi-

bilities of this Office to establish and maintain suitable standards for geographic classifications.

Currently, 227 Standard Metropolitan Statistical Areas have been defined, following established criteria. New standard area definitions are developed by the Office with the advice of an interagency committee, as incorporated cities attain a population of 50,000. The area definitions, used by Federal agencies in presenting both benchmark and current data, provide a common geographical basis other than the State or county. A review of the present criteria is now underway and user groups will be consulted on changes suggested by their experience. One such proposal, noted in the compendium, would involve the expansion of existing SMSA's into larger "functional economic areas," supplemented by smaller functional areas centered on cities of less than 50,000 population.

A related interagency program sponsored by the Bureau of the Budget seeks to establish common classifications of geographical units (countries, States, counties, and places) with a single code identification for each unit which would be used by all agencies in preparing program information. Use of a common identification of such geographical units will increase the advantages obtained from Government-wide use of electronic data processing.

6: Improved coordination based on the national economic accounts and major models of the behavior of the economy, the educational system, etc.

The comprehensive measures of economic performance, principally the national economic accounts, represent a major arm of coordination of economic statistics. Masses of data are organized in these measures in order to provide systematic and significant summaries of economic activities. The report of the National Accounts Review Committee and the study of "A Federal Statistics Program for the 1960's" stressed the importance of integrating the principal measures of economic performance.

Broadly conceived, these major measures of economic performance include the traditional income and product accounts, the input-output tables, the flow of funds and the future extension of the accounts into national and sector balance sheets. Among the developments which are to be actively pursued in the period ahead are the following:

(a) The integration of the income and product accounts with the flow of funds. As noted in the replies from the Office of Business Economics and the Federal Reserve Board, the classifications and definitions in the flow of funds and in the income and product accounts have moved considerably closer together as a result of research work in both sets of data.

(b) The extension of the national accounts to include estimates of tangible capital stock and eventually national and sector balance sheets. As noted in the replies of the Office of Business Economics and the Census Bureau, work is going forward to develop wealth estimates and to plan for an inventory of wealth to cover the period around 1970. Other agencies will also cooperate in this project, particularly the Internal Revenue Service, which notes in its reply the material it hopes to provide in the area of the service industries and finance, insurance and real estate industries.

(c) The resolution of differences between industrial production indexes and gross national product in order to resolve problems in measurement of economic growth.

(d) The continued coordination with international organizations including the review and revision of the international system of national accounts.

(e) The improved quality and flow of basic information to the national accounts, for example, the flow from the economic censuses to the input-output table. Such improved flow, both in the quality of data (e.g., more data on materials consumed, and on sales by class of customer) and in the speeding up of the availability of the basic information, will significantly improve the usefulness of the input-output table.

This general problem of improving the quality of basic data for the national accounts is well documented but requires continued support. An outstanding example is the need to develop price data along sector lines or more generally in ways to provide more consistent analysis with production developments.

Beyond the national economic accounts are the various models used partly for analytical purposes but more often for projection purposes. These models are moving into a new phase. The quarterly model of the Social Science Research Council, for example, and a variant of the Klein model at the Office of Business Economics, will require continued testing and verification. In an earlier stage a model would be described in an article providing a reasonably good fit for past activities but not necessarily kept up to date to "live with" the problem of continued verification. Also models are being developed partly with an eye to their possible policy implications. Economic growth models and a model of the educational system in terms of manpower flows may have such implications.

Even though we may now be in a newer phase of testing the efficiency of these models for projection and perhaps policy use, we are still some distance away from using them as a principal basis for determining priorities of a statistical system. In the not too distant future it is hoped that these models, which provide behavioral relationships rather than identities as in the national accounts, will be a major basis for organizing masses of data into meaningful relationships and hence provide a major coordinating arm of the Federal statistical program. It is hoped also that such models of a macro- or micro-nature will provide a basis for better integration of economic and social statistics.

CONCLUDING REMARKS

The foregoing emphasis on improved system design of statistical activities is in recognition of the greatly enlarged problems of statistical coordination. While the problems have multiplied, the means for their resolution are not hard to find.

We must redress the imbalance which assigns so much more resources to information gathering than to the effective organization and analysis of information. This imbalance was brought home to me in the recent concern about improving the statistical work on our international payments position. We spend over \$5 million to collect basic data on international transactions but only a few hundred

thousand dollars on their analysis and very little on thinking about how these data should be better organized.

While it is natural for data collection to cost more than their processing and the thinking about their improved organization, the difference today is much too large.

Statistical data remain essentially raw data unless users make creative use of them. That is to say, unless significant inferences are drawn from the data and beneficial decisions made, statistics remain no more useful than any raw material waiting to be transformed into a final product. While this means that users of data as well as producers have responsibilities in a full statistical program, it also means that the improved organization for analysis of data will help bring users and producers into a more creative relationship.

I hope that the occasion of the compendium gathered by your subcommittee will provide a much needed emphasis on the need for improving the organization of the Federal statistical program.

Sincerely yours,

RAYMOND T. BOWMAN,
Assistant Director for Statistical Standards.

AGENCY REPLIES TO REQUEST BY THE OFFICE OF
STATISTICAL STANDARDS FOR COMMENTS ON
"IMPROVED STATISTICS FOR ECONOMIC GROWTH"

1. Bureau of the Census
2. Bureau of Labor Statistics
3. Internal Revenue Service
4. Department of Agriculture
5. Office of Business Economics
6. National Center for Health Statistics
7. Office of Education
8. Council of Economic Advisers
9. Federal Reserve Board

BUREAU OF THE CENSUS

U.S. DEPARTMENT OF COMMERCE,
BUREAU OF THE CENSUS,
Washington, D.C., October 19, 1965.

MR. RAYMOND T. BOWMAN,
*Assistant Director for Statistical Standards,
Bureau of the Budget, Washington, D.C.*

DEAR RAY: We are indeed pleased to have an opportunity to comment on the statements of economists and statisticians reproduced in the joint committee print, "Improved Statistics for Economic Growth." This seems to us to be a constructive way to improve the Federal statistical program, and we are glad to work with you and the Joint Economic Committee toward that objective.

The enclosed set of comments is grouped according to the subject for which the statistics are compiled—agriculture, business (retail and wholesale trades and services), construction, foreign trade, governments, housing, manufactures, population, transportation, and wealth. The final section carries some comments on more general topics in which we are interested, although some of these are also touched upon in the subject sections. They include usefulness of the data, preparation of data guides, receiving and providing data in machine-readable form, central data source, providing data for small geographic areas, improving timeliness, revising industry and commodity classifications, and reducing burden on respondents.

If you consider further discussion of any of these suggestions appropriate, we shall be glad to participate.

Sincerely yours,

A. ROSS ECKLER,
Director, Bureau of the Census.

Enclosure.

COMMENTS OF THE BUREAU OF THE CENSUS ON IMPROVED
STATISTICS FOR ECONOMIC GROWTH

AGRICULTURE

Revise census definition of farm (Kellogg, Hamilton)

We plan to review, with the U.S. Department of Agriculture, with users of census of agriculture data, and with the Special Advisory Committee for the 1969 Census of Agriculture, possible revisions of the census definition of a farm.

Revise census classification of farm by economic class (Hamilton)

Discussions regarding the revision of the economic classification of farm for the 1969 Census of Agriculture have already started. A session of the American Farm Economic Association at Tulsa, Okla., August 23 to 26, 1965, was devoted to the economic classification of farms and to some proposals for revision.

Increase collection of data on inputs and income (Edwards, Glidden, Hamilton, Toof, Winemuller)

The Bureau of the Census has attempted to collect an ever-increasing volume of data on inputs and income. The 1965 sample survey will provide data on income for farm operators and members of their families from 11 sources. This sample survey also contains more than 50 inquiries on purchases of nonfarm inputs, machinery, and capital items. The collection of detailed data on income, inputs, and capital has been limited to sample surveys because of the difficulty of obtaining these types of data from a large number of farm operators.

BUSINESS: RETAIL AND WHOLESALE TRADES AND SELECTED SERVICES

Improve retail sales data to prevent substantial revisions (Ellis)

Partly as a consequence of the limitation in the figures which retailers can report immediately after the close of the month and partly because considerations of cost and processing load necessitate use of a limited sample, the early retail figures cannot achieve the same accuracy as the ones collected later from a larger sample and processed over a longer period. Despite these limitations the early figure in most months is within 1 percent of the final one and almost always gives an indication if not a precise measurement of the trend.

Separate mail-order sales of department stores (Bronaugh)

The Bureau's basic statistics are on an establishment rather than company basis with each establishment classified according to its primary activity. In the quinquennial census, sales of all establishments primarily doing a mail-order business are classified separately with the establishments subdivided into subclassifications on the basis of the merchandise sold. In the monthly retail statistics program, separate mail-order data are published only for the category "Mail-order houses (department store merchandise)" under the general

merchandise group. These figures include the sales of establishments primarily selling department store merchandise by mail order. In this program sales of other mail-order houses are classified by kind of business on the basis of the merchandise sold and are combined in the monthly report with store sales in the same kind of business. Theoretically it would be possible, assuming that business records are adequately maintained to permit it, to request establishments not classified as mail-order establishments to report their mail-order sales separately from the rest of their business. This suggestion could be reviewed with our advisory groups to determine both extent of need for this detail and the nature of the reporting problem.

Continue monthly report on retail sales, grocery and drug, geographic areas (Koponen)

The Bureau's monthly reports on retail sales are being continued with more stress being placed on geographic breakdowns below the national levels.

Improve timeliness of business census reports (Greenwald, Griffin, Knight, Sholes)

Continued improvement is being made in the timeliness of business census reports. The completion of the three 1963 census area report series ranges from 3 to 5 months earlier than those of the 1958 census and the subject series from 8 to 12 months earlier. Improved techniques and equipment should permit further gains in the next census. Past performance would appear to merit the comment on the desirability of more realistic anticipations of time required for issuance of census reports.

Improve information on service industries (Burns)

The Bureau is planning to begin publication early next year of monthly figures on receipts of the selected service trades covered in the census of business, in total and for selected major groups. It is not evident from the comment whether it bears on this or some other aspect of the service trades. In any event, any specific proposals can be explored in planning the service trades program.

Provide various grocery store data for small counties (Wiuff)

The limitations imposed by rules on confidentiality preclude showing for each county the detail requested. Also, apart from this consideration, publication in this amount of detail would be extremely costly. With respect to supplying a breakdown of sales data by product groups, the census of business provides such data in the merchandise line reports for each geographic division, State, and standard metropolitan statistical area (SMSA), and as a group for all counties in a State outside of SMSA's. This series of reports in itself accounts for over 4,000 pages of statistics.

Provide more merchandise line statistics (Nelson)

In the 1963 census, over 4,000 pages of statistics on sales of retail stores by major and selected lines of merchandise are being published. Also the possibility of instituting an annual retail merchandise line program is being actively considered. It would appear that at the present time retail recordkeeping practices are not adequate to support a more frequent than annual merchandise line statistics program.

Provide data on discount houses (Bronaugh)

No acceptable definition of discount houses has been devised despite extensive industry consultation. No separate statistics are possible until the concept can be defined.

Calculate quarterly averages for monthly retail sales (Wiuff)

Because there are a variety of ways in which retail sales figures might be presented to satisfy different users, our feeling is that provision of monthly figures in dollar form—both adjusted and unadjusted—satisfies the most important direct uses and permits users to make combinations to fit their own purposes.

Explore possibility of anticipatory data for inventories of nonmanufacturing business (Greenwald)

Measurement of anticipatory inventories in effect implies measurement of business opinion as to future sales and future orders. Before the Bureau undertook such a program, it undoubtedly would want to confer with its Government and industry advisory groups regarding the likely significance of an opinion measure of this type. It also would be necessary to evaluate the reporting feasibility. At present the problems of getting adequate reporting of existing inventories at monthly intervals have been considerable.

Provide continuing picture of business establishments (Ferber, Orcutt)

Possibly the Bureau's current programs could be adapted to this type of objective. However, it probably would require the collection of considerably more data than now are collected and the solution of difficult disclosure problems. Initially, the Bureau would have to divert talent and resources to explore the problems and develop a program. This would imply an agreement that eventually there would be justification in expending significant resources for this purpose.

CONSTRUCTION

The most general of the observations seem to state that the available body of construction statistics as a whole has serious inadequacies. This is certainly the case. In its construction statistics program, the Bureau has been moving to remedy at least some of these inadequacies. Continued expansion and improvement of the Bureau's program is desirable to narrow the area of inadequacy further.

Take census of construction industry (Butler, Keenan, Robinson)

The Bureau of the Census is considering the addition of a census of the construction industry to the economic censuses scheduled to cover the year 1967. Although limited in the detail it would produce, such a construction census would provide the general type of information about the industry which a number of the statements have called for, would make an important contribution to the construction component of interindustry studies, and would be the first step toward more exhaustive subsequent surveys and censuses.

Improve data on housing starts (Bongard, Cleveland, Ellis, Greenwald, Hoadley, Plain)

The volatility of the seasonally adjusted housing starts series, which obviously complicates its interpretation on a month-to-month basis, appears to be largely a reflection of the real nature of the phenomenon.

Seasonal adjustments have recently been improved by the introduction of adjustment factors fully appropriate to the new housing starts series. Complete resolution of differences between the current housing starts series and the data from the census of housing and the surveys of the components of change presents numerous problems, but it is planned that the inconsistencies existing prior to 1960 will have been largely removed for the decade between 1960 and 1970.

Some information on the characteristics of new housing units started is now being made available either directly, by providing some such data on new apartment buildings started, or indirectly through publishing data on the characteristics of new one-family homes sold and of contractor-built one-family homes started. (These latter data come from the housing sales survey conducted under contract with the Housing and Home Finance Agency.) It would be valuable to expand this information to cover the remaining types of one-family homes started, and to provide additional characteristics information for apartment buildings.

Improve data on value of new construction put in place (Hoadley, Plain)

The Bureau of the Census regards the improvement of the series on the value of new construction put in place as having the highest priority. Additional resources are currently being devoted to this series and extensive work is under way to establish the value-in-place series on an acceptable basis.

Provide more geographic detail (Gershenson, Goddard, Keenan, Plain, Simpson)

The importance of this need is obvious, but provision of geographic detail for most kinds of construction statistics would be extremely costly and sometimes technically very difficult. The Bureau of the Census has therefore set as its present objective only a partial satisfaction of the needs for geographic detail. Also, even where geographic detail is possible, the data may be made available less frequently than national or regional totals.

A census of the construction industry would provide geographic detail on the location of the establishments or other reporting units, and probably also on the location (by State) of actual construction work. For new residential construction, small-area data are now available for building permits but not for housing starts. With such detail available from building permit statistics, provision of geographic detail for housing starts would appear to have a rather low priority, especially because the cost would be very high. Provision of geographic detail for nonresidential buildings, and even more certainly for nonbuilding construction, raises particularly difficult questions of both technique and policy; these questions need considerably more study.

In general, provision of geographic detail for specific local areas would appear to be most feasible where local cooperation is the strongest and most effective.

Improve building permits data (Hamburg, Mandel, Cleveland)

The Bureau of the Census has taken the first steps in a long-range program to accomplish such improvement. It is agreed, however, that this program should be pressed harder and faster than in the past. (Incidentally, improvement in the basic permit records might provide

the basis for the collection of current data on demolitions, as suggested in some of the statements.)

Provide data on residential alterations and repairs (Ellis, Hoadley, Plain)

The Bureau of the Census has resumed the survey of residential alterations and repairs beginning in 1965. This survey incorporates some improvements over the survey as conducted in 1963 and previous years, and the Bureau will endeavor to introduce further improvements as it gains experience in this area.

Provide index of construction prices (Plain, Stein)

The Bureau of the Census regards the measurement of changes in construction prices as having a high priority. It is hoped that, as research progresses, substantial work in this direction can be undertaken in the near future.

FOREIGN TRADE

Improve foreign trade statistics (Benedict, Ellis, Messing, Rubin, Sholes, Stein)

In some of the fields, action was in progress at the time the letters were written. For example, the export commodity classification had been revised to achieve greater comparability with imports, production, and international trade data, but the first statistical publications containing revised classifications were still in process of being printed. Although we have supplied added commodity detail to the greatest extent which we believe practical without undue expense and without sacrificing other important objectives, we have had to set limits upon the extension of the program in this respect.

Two of the suggestions involved important statistical needs of which we have long been aware but for which exploratory work would be the most that we could consider at the present time because of the great difficulties involved in obtaining the desired statistical information. These are the suggestions for a breakdown of Government-sponsored exports and for State or metropolitan area of origin/destination detail by foreign country of destination/origin on exports and imports. The two surveys which the Bureau has conducted on exports by manufacturers have supplied some of the needed information, but this has not entirely eliminated the pressure for more extensive statistics.

The proposal for an industry committee is not new. The attention of an outside group, if knowledgeable and broadly oriented, might be of considerable value to the program.

The suggestions about the price series and price indexes are primarily for other agencies in the Department of Commerce; however, the Bureau of the Census may be able to cooperate with respect to the input data for these series.

A number of comments among the letters, which were directed toward Government statistics in general, have application to foreign trade statistics. In many of the areas mentioned, work is now going on or has been a regular part of the Census Bureau program. These include the provision of fuller explanations and better definitions of the limitations of the data, special tabulations to help users bridge any necessary breaks in the series, the addition of comparative data for prior periods to current publications, and the publicizing of the

types of unpublished data available to users. In particular, the Bureau has done major work in the fields of increasing international comparability, and in working toward greater compatibility among commodity coding systems. The Bureau is now initiating a major effort to move up the release dates for foreign trade statistics.

The lessening of reporting burdens upon respondents was mentioned in some of the letters. Although progress in this area is necessarily slow, the Census Bureau has fully participated in all practical efforts to cut down the very heavy respondent burden in foreign trade statistics. This includes a redesigning of the export declaration form for compatibility with standard commercial export documents, and the progressive removal of requirements for the filing of declarations where investigation shows that it can be done without harm to the statistics. Shipments to the Canal Zone and shipments under \$100 to Canada and United States possessions are recent examples. Experiments with monthly reporting in lieu of reporting of individual shipments are also going forward, within the limits of present practicability.

GOVERNMENTS

Expand data on Government expenditures (Butler, Greenwald, Ferber, Simpson)

Some gain on this score has recently been made, with the new quarterly sample survey of the State-local construction expenditure, from which findings are now regularly available on a current basis. The Bureau of Labor Statistics gathers monthly data on State-local spending for salaries and wages. Other components of State-local expenditure, however, which presently amount to nearly \$40 billion annually, are measured only on an annual basis.

It would be feasible to develop relatively precise quarterly national estimates of such expenditures (with limited subclassifications) from sample surveys which, after they had been established, would probably not cost more than about \$100,000 a year.

The assembly of Government expenditure data in terms of amounts for detailed kinds of goods and services would be far more difficult and conjectural. The Census Bureau is cooperating with the Office of Business Economics in its present limited efforts at such measurement, for input-output purposes. However, OBE has urged that a considerably expanded operation should be undertaken as part of the 1967 Census of Governments, as a basis for better benchmark figures on governmental input which might be developed for the census year. Whether or not this is done will presumably depend upon whether the additional funds which would be necessary can be requested and obtained for the 1967 Census of Governments.

HOUSING

Improve statistics on housing vacancies (Cleveland, Hoadley)

The Census Bureau agrees that vacancy statistics should be improved: first, by providing SMSA data and, second, by increasing the number of characteristics obtained for vacant units. A program to expand the national vacancy survey, which admittedly "averages out" the different housing markets, to include 35 to 40 SMSA's was recommended 2 years ago but was not adopted. Some of the

work already done for the 1970 Census of Housing deals with this issue and our advisory committee is giving special attention to vacancies.

Improve timeliness of housing reports (Plain)

We are constantly attempting to improve the timeliness of our reports and we believe that the careful planning now underway for the 1970 census will produce the housing volumes more quickly than in the past.

Show number of apartment houses in census of housing (Sholes)

We are attempting to develop ways of counting the number of residential structures in the census. However, this is a difficult concept and has not been successfully handled in the past. A count of apartment houses is a further complication in that housing data users would have to agree on the definition of an apartment house. Assistance in developing this definition would be appreciated.

Provide more current and more detailed information on number and character of radio sets in use (Mandel)

We would be happy to undertake current surveys dealing with the number of radio sets if funds were available from private sources. Correct information on radio sets is more difficult to obtain than information on television sets because of the small size and mobility of radio receivers.

Obtain more detailed geographic data on housing vacancies (Cleveland, Plain)

We should like to obtain more geographic data on housing vacancies, but we have not been successful in obtaining funds for current statistics for smaller areas. The topic will be under consideration for the next census of housing.

Provide technical assistance to localities to enable them to develop housing data (Plain)

We have a program of technical assistance to localities to help them develop data. We are preparing a manual which can be supplied to local groups, and we are prepared to give some technical assistance on request.

Take mid-decade housing inventory (Cleveland, Hoadley, Plain)

We firmly believe that a mid-decade census would be advantageous to housing data users. We have twice requested an inventory but were denied funds.

Explore possibility of perpetual inventory of housing (Plain)

A perpetual inventory is possible within the framework of a continuing series of components of change surveys or an address register that is brought up to date periodically. To date, we have done nothing formally to explore the possibilities of a perpetual inventory of housing, but we believe that the cost of this project may be high.

Improve financial data on housing (Plain)

Data on residential finance have been provided by the Bureau in previous censuses. We should like to expand this program and agree that the data are needed.

Provide statistics on home mortgages classified by characteristics of the borrowers (Gershenson)

The costs involved in this kind of study are substantial and might well total several million dollars to meet the needs outlined.

MANUFACTURES

Provide more and better data (Brinberg, Butler, Nelson, Rubin)

Under this general heading several comments were made that can appropriately be consolidated, such as:

1. Collect both physical volume and dollar value output statistics.
2. Balance the needs for information with the degree of detail collected.
3. Improve the accuracy of the annual survey of manufactures and from this survey provide five-digit industry data as well as four-digit industry information for regions.
4. Add to the current program or to the annual survey of manufactures more detailed product data and include in the census of manufactures additional materials-consumed information.
5. Provide general statistics such as employment, salaries and wages paid, cost of materials, value added, etc., for secondary producers.
6. Improve steel inventory data.

Our observations on these comments follow:

1. In the census of manufactures, dollar value data are collected for each of the more than 11,000 individual products enumerated, and physical volume data are collected in all instances where it has been determined that such a measure is meaningful and needed. Recently for selected product classes in the annual survey of manufactures, we have added quantity information. In our current commodity program, both quantity and value data are collected for a large part of these series, and additional efforts are being made to add quantity information, at least annually, for those series where only value figures are collected.

2. The point was also made that the needs for information and the degree of detail collected should be in balance. We agree. There is no aspect of industrial statistics that needs more attention than the specific justification for the collection of information and for evidence of the needs for such information. This is not to say that concrete justification for the information does not exist but rather that such justifications are not adequately communicated to the compiling agencies. Further, many users of statistics obtain their information from such sources as the trade press, which republishes Census Bureau and other statistical data.

3. The annual survey of manufactures was initiated in 1949 to provide data for the most important measures of activity for the years between the regular complete quinquennial censuses of manufactures. This survey, which covers some 60,000 establishments, was not designed (nor will it support the publication of statistically valid figures) for 5-digit industry data such as are provided in the specialization tables of the census of manufactures, nor will it support 4-

digit industry data for geographic regions. In most recent years 2-digit and 3-digit data have been provided for census divisions and States and for standard metropolitan statistical areas (SMSA's) with more than 40,000 employees in manufacturing. General statistical information is shown for "all manufacturing" for smaller SMSA's and at the county level for those counties with manufacturing employment exceeding 5,000 to the extent that such data meet both our tests for disclosure and our tests for an acceptable range of standard statistical error. To provide more detailed information from this source would require the extension of this survey to many thousands of additional establishments—an expansion that could not be undertaken within our present resources.

4. With regard to the suggestion that more detailed product data should be provided either in the Bureau's current program or in the annual survey of manufactures, we have held the position that annual benchmark statistics should be available for all important industries. In recent years, detailed product surveys have been initiated covering such important commodity areas as pumps and compressors, motors and generators, industrial controls, electronic products, instruments, housewares, lighting fixtures, pharmaceutical products, plastic products, and prepared animal feeds. These annual commodity surveys were established as a part of the current program rather than as an extension of the annual survey of manufactures which, since it is conducted on a sample basis, will not ordinarily support more detailed product information than the five-digit product class data presently collected. The suggestion was also made that additional materials-consumed information should be provided in the quinquennial census of manufactures. In each of the recent censuses, particularly those for 1958 and 1963, a concerted effort was made to add, to the list of materials-consumed items, those materials or components that account for the most important inputs of particular industries and that were considered to be generally reportable. Further, in each of these censuses, a supplemental sample survey has been made to collect additional materials-consumed information, particularly to serve the needs of the Office of Business Economics in compiling the input-output study. While the needs and interests for more detailed data on materials consumed are well recognized, it should be specifically pointed out that such interests are typically those of the supplying industry while the burden of reporting falls upon the consumers.

5. In the census of manufactures, general statistical data such as employment, salaries and wages paid, cost of materials, value added, etc., are provided not only in total for the four-digit industry but also separately for establishments specializing in the five-digit product classes classified therein. Such general statistics are collected only for the plant as a whole. We have not found it feasible to collect these general statistics for separate products or product classes produced within a single plant.

6. It is unlikely that the timeliness of the monthly series on steel inventories could be maintained if efforts were made to expand the coverage and provide greater detail. Further, any such expansion would be competitive with suggestions made directly to the Bureau for similar limited data covering other major metals such as aluminum and copper.

Give less attention to concentration ratios (Ellis)

The suggestion was made that as a means of providing more and better data desired by business that less information might be produced with regard to concentration ratios. The concentration ratios and related data are compiled from fully corrected computer tapes using for the most part previously prepared and proved computer programs. It is not believed that these computations and publications significantly compete with other census tabulations. The data on concentration ratios in manufacturing industries are prepared by the Bureau of the Census for the Subcommittee on Antitrust and Monopoly of the Committee on the Judiciary of the U.S. Senate.

Eliminate duplication (Erickson, Everson, Goddard, Morgenstern)

As a regular practice, the Bureau tries to convert each of its monthly and quarterly series that have private counterparts to annual benchmarks, wherever privately compiled data meet adequate standards of quality and are made publicly available. In many of these instances, such as softwood, plywood, wood pulp production, and selected heating and cooking equipment, the Bureau has converted a monthly or quarterly survey to an annual report. In certain other areas, the industry has protested and has demonstrated that there would not be adequate data available unless the Bureau continued its own series.

In the census of manufactures and the annual survey of manufactures, data are collected which may be considered as duplicating to some extent similar data collected by other Government agencies; examples are the employment and payroll data collected by the Social Security Administration and the Bureau of Labor Statistics. However, these data are included in our program because of their relationship to other measures such as output statistics. Furthermore, for multiunit companies, the records of other agencies are not always filed on a plant basis; accordingly, the Census Bureau data are the only source for detailed geographic data. We should add, however, that we are continuing to pursue the possibility of using administrative records to a greater extent in future censuses to relieve the reporting burden, particularly for very small firms.

State extent of coverage (Brinberg)

The quinquennial censuses of manufactures are complete canvasses of all manufacturers operating during the census year; a statement on the completeness of coverage is included in the introduction to each census publication. The annual survey of manufactures is a sample canvass of some 60,000 manufacturing establishments selected on the basis of scientific sampling procedures. The coverage and description of this survey, which is conducted for the years between the quinquennial censuses, are detailed in the introduction to the annual survey of manufactures publications. For the more current series, such as our monthly, quarterly, and annual commodity statistics, a statement tells whether the survey is a complete coverage canvass or a sample. If the latter, a detailed statement of the sampling techniques employed is included in the publication, or a statement is made that such a detailed statement is available upon request.

Obtain industry participation in drafting surveys (Everson)

In drafting the content of each of the segments of its overall program of industrial statistics, the Census Bureau seeks industry participation as well as participation by representatives of other Government agencies. The product inquiries of the 1963 Census of Manufactures were reviewed by several thousand small, medium, and large companies as well as by all known trade associations.

Furthermore, such Government agencies as the Business and Defense Services Administration and the Bureau of Labor Statistics, were consulted before forms were submitted to the Bureau of the Budget for approval.

Similarly, the current reports, such as those conducted on a monthly, quarterly, or annual basis, are periodically reviewed with industry to assure ourselves that new and important items are recognized and that products which have become of lesser importance are given only that attention which their volume warrants. Each new survey that is drafted is similarly developed with the closest cooperation of industry groups.

For the review of such general statistics as numbers of employees, salaries and wages paid, man-hours worked, cost of materials consumed, etc., we have largely looked to those business groups that cover a broad range of industrial activity, such as the National Association of Manufacturers, the National Industrial Conference Board, and the U.S. Chamber of Commerce, which are represented on the Advisory Council on Federal Reports; to organizations such as the National Bureau of Economic Research; and to other Government agencies.

Improve indexing of census of manufactures publications (Ellis)

The suggestion that the indexing of the census of manufactures can be improved has considerable merit. We know we have a problem here in purveying our wares, and we have been trying to do a better indexing job.

The 1958 Census of Manufactures volumes contained a table of contents and also a "Guide to Contents of Industry Volume Tables" and an appendix that lists, in alphabetical order, the individual products for which output data were collected with the product code and the page of the volume where these data appear. For the 1963 Census of Manufactures, there will be, in addition to the table of contents and the alphabetic list of manufactured products, sample tables that will guide the reader to the types of data shown in the stubs and the columns of individual tables.

As a separate document, the Bureau has revised and released the "Guide to Industrial Statistics," which explains the entire industrial statistics program of the Bureau of the Census, indicating the types of data that are published and giving examples of the manner in which such statistics are presented. This publication also includes a chapter on other important sources of industrial statistics, such as those compiled by other Government agencies.

Make seasonal adjustments (Brinberg)

At present, only a very limited number of the Census Bureau's current industrial series are seasonally adjusted. These include the monthly report on manufacturers' shipments, orders, and inventories, and the series on cotton consumption. Now, however, with the

availability of computer programs for seasonal adjustment and with the conversion of the Bureau's entire program of industrial statistics to computer processing, we expect that all series that have been collected over a sufficiently long period to provide the basis for seasonal adjustment will include seasonally adjusted data in the reasonably near future.

Provide data on manufacturing capacity (Rubin, Messing, Copeland, Butler, Burns)

As extensively attested several years ago in hearings before the Subcommittee on Economic Statistics, the statistical measurement of industrial capacity presents difficult problems. Some progress has been made in developing new methods for measuring capacity, and a working paper on this subject was published early this year (Bureau of the Census Working Paper 18, "The Measurement of Performance Potential in Manufacturing Establishments").

One of the objectives of our investigations in this field is the development of a measure of production potential that is not an engineering-type estimate (as are most existing measures) but which can be calculated, with new computer techniques, through the use of available data on production and productive assets. The basic units for this calculation would be individual manufacturing establishments; and, with such units as statistical building blocks, the measurement of capacity and its utilization would be possible at the industry level, for geographic areas, and for economic groupings such as durable and nondurable goods producers, etc.

The further development of the measure described, and particularly assembling historical records on which it will be based, will require some time. Although the measure will not be available in the near future, the findings thus far are encouraging, and we hope that a capacity-type measure of broad-scale applicability will eventually be available.

Improve coverage and definition of the textile industries (Powers)

The Census Bureau has long been the principal source of current statistics on the textile industries, beginning early in the century when the Congress recognized the importance of an accurate continuing record of cotton supply and usage and the level of activity in cotton textile mills. In 1960, the Bureau undertook a considerable expansion of its statistical program in textiles as an outgrowth of earlier recommendations of the Congress through the Senate Committee on Interstate and Foreign Commerce. The main features of the expansion were the establishment of a new monthly series on textile goods production, inventories, and unfilled orders, and annual coverage of certain textile industries such as narrow fabrics and floor coverings, for which detailed statistics had been available previously only at 5-year intervals from the census of manufactures.

Improve timeliness of industrial reports (Powers, Kellogg, Everson, Brinberg, Shank, Miller, Nelson, Sholes)

We recognize that the usefulness of statistical information is importantly dependent upon its prompt release, and that our past record is unsatisfactory in this regard. This is a matter of considerable concern to us and we are presently devoting intensive efforts to a revised processing system that will utilize electronic data processing equip-

ment to a much greater extent than in the past. We expect this major change to make a significant improvement in our release dates. We are also hopeful that this change will lead manufacturers to report more promptly; that would also improve the timeliness of our reports.

Provide State or metropolitan area data on capital investment (Gershenson, Roche)

Providing data for States or metropolitan areas would pose a difficult problem for agencies that derive their statistics from corporate returns, since the activities of many corporations, particularly the large ones, are geographically widespread. However, one of the series that does provide some geographic data on assets—and could perhaps provide more—is the Census Bureau's annual survey of manufacturers. It can do this because the basic reporting unit is the establishment rather than the company. Although the annual survey is conducted on a sample basis, which limits the amount of reliable geographic data that can be published, a considerable amount of information on manufacturers' capital investment is regularly published for States and metropolitan areas.

In the past, these data have covered investment at manufacturing locations only. In the 1963 economic censuses, however, we are trying to develop statistics on investment for nonmanufacturing locations as well. These data will provide a framework for local studies or surveys that may carry the statistics forward on a more frequent basis or in more detail.

Improve standard industrial classification (Kellogg, Greenwald, Butler, DuBrul)

Perhaps the most important feature of the standard industrial classification (SIC) is that it is generally used in Government statistics and is widely and increasingly used by private groups. Surely this system can be improved. We would agree that an important improvement would be the introduction of a system of multiple classification that would make available not only the traditional statistics, which have been provided in the past at the two-, three-, and four-digit level, but also other meaningful groupings of data. Recently in our series on Manufacturers' Shipments, Inventories, and Orders, we introduced a separate table regrouping these data by market categories along the lines of the classifications used by the Federal Reserve Board. It should be recognized, however, that any major changes in a classification system such as the SIC create problems in providing comparable data over time. We would feel, therefore, that attention should be focused upon working within the present SIC or some modest modification thereof toward supplemental regroupings rather than toward extensive revision.

POPULATION

Adjust data in Consumer Buying Indicators for seasonal variation (Wiuff)

We agree with Mr. Wiuff's comment that seasonal adjustments for the data included in Consumer Buying Indicators would be very useful; experimental work is in process to develop such factors.

Improve timeliness of statistics that measure growth of cities and SMSA's
(Elgass)

The Census Bureau's program on population estimates has been developed only over the last few years. It is hoped that improvements in timing can be made in the future, but there are limits imposed by the delay in the availability of such basic estimating information as the local data on school enrollment.

Provide more frequent population forecasts by State (Wiuff)

The Census Bureau has not been able to obtain the funds to develop a regular and improved program of population projections.

Provide forecasts of county population and of income for States and counties (Wiuff)

A great deal of methodological research would have to be done to determine whether adequate "forecasts" of population and income could be prepared for counties.

Do not postpone expansion of the current programs for State and SMSA estimates and projections in anticipation of a better one (Hamburg)

The recently instituted program of metropolitan area population estimates is proceeding as rapidly as funding permits. Neither this program (or the State estimates program) is being delayed by the experimental work now in process on the use of administrative records for local population estimates. The projections program is also proceeding as rapidly as resources permit, and is not affected by the new research work which might be done in the future.

Improve education statistics (Knight)

The Census Bureau is doing its best to determine how its current program on education statistics can be improved within the available resources, and is embarking on a series of advisory meetings to determine what data on education (and other subjects) should be obtained in the 1970 census. Furthermore, the Census Bureau is cooperating with other agencies by making available, on a reimbursable basis, its survey and tabulating services so that additional information and cross-tabulations on education can be obtained.

Improve surveys of financial assets and consumer expectations (Katona)

The Census Bureau is continuing its work on improving survey techniques in the fields of financial assets and consumer buying expectations; and it is also initiating studies of the relationship of buying plans to income expectation and general economic outlook.

Restore to census of population the reports dealing with economic aspects of population and labor force; e.g., industry statistics (Burns)

The amount of labor force data published from the 1960 census far exceeded the 1950 census output. However, there was one major loss: the detailed report on industry mentioned in this comment. This report is one of a set that came at the end of the 1960 census tabulation program, and unfortunately the available funds could not be stretched to cover all the reports. Several times in the last few years, it appeared that outside funds would become available to prepare this report (as happened to a number of other reports in the set), but the cost of this complex tabulation deterred the prospective sponsors.

Provide continuing, comparable series on age, sex, location, and other population characteristics (Brinberg)

The Bureau of the Census has found that there are demands for several different population universes. The decennial census data relate to total resident population, with very few exceptions such as supplementary statistics on Americans overseas. The Bureau's monthly population estimates for the Nation as a whole are shown on three bases; i.e., total population including Armed Forces abroad, total resident population, and civilian resident population. The annual State estimates are shown for the last two categories only, because, in accordance with the decennial census concept of resident population, the Armed Forces abroad are not part of the population of the individual States. With regard to the data published from the Current Population Survey, certain operational considerations determine whether the coverage includes or excludes the institutional population and members of the Armed Forces in barracks-type quarters. For most of the months of the year, data are collected for the noninstitutional population since the primary function of the survey is to provide statistics on the labor force. In March each year, when demographic data are collected, the coverage includes inmates of institutions, but this extension has no effect on the monthly labor force series.

Improve statistics on employment and unemployment (Copeland, Ever-son, Ferber, Hoadley, Keenan, Morgenstern, Rubin)

These points were generally covered in the Gordon committee's study, and we are cooperating with the Bureau of Labor Statistics to make the necessary improvements within the available resources.

Tabulate 1960 census data to relate income, education, sex, and age to place, industry, and occupation of work (Stein)

Substantially more detailed cross-tabulations of the decennial census data were made in 1960 than ever before, in recognition of the need for such data and because they were made feasible by the electronic computer. These tabulations appear in volume II of the 1960 Census of Population and, while not in the full detail suggested in the comment, a great many analytical needs were met; it is hoped that considerably more will be done in the 1970 census.

Develop information on use of leisure time and on travel expenditures (Katona)

We agree that data on leisure time use and travel expenditures would be most useful, and have attempted unsuccessfully to obtain funds for special supplements on these subjects on the Current Population Survey. The Census Bureau has obtained certain data on recreational activities, at the request and expense of the Interior Department, and some additional data on expenditures may be obtained in the future in connection with the survey of consumer buying intentions.

Develop more data on the poor (McKinley)

A large-scale statistical program on identifying and describing the poor is now being sponsored by the Office of Economic Opportunity, and the Census Bureau is participating. In addition, the Census Bureau is utilizing its existing decennial census and Current Population Survey data to help illuminate this area.

Provide more detail in labor force statistics (Backman, Butler, Ellis, Gershenson, Harding, Stein)

The recommendations of the Gordon committee in this area are being implemented as rapidly as possible.

Obtain data on marriage and divorce, religious preference, and prevalence of various forms of contraception (Notestein)

The Census Bureau is planning to obtain, within the next year or two, additional data from the Current Population Survey on family formation, composition, and dissolution. To collect information on contraception appears at least premature for a Federal agency at this time. We expect to review questions relating to religion as we begin to develop plans for the 1970 census.

Collect data on plans to marry and intentions to have children (Coale)

The Census Bureau feels, at this time, that the usefulness of the data on intentions to have children has not been established sufficiently for this subject to be included in the Current Population Survey. Further work in this field may establish a firmer base for its inclusion.

Publish more detailed data for number of families with children of a specific age (Wiuff)

This suggestion will be given further consideration when the relevant current (and 1970 census) tabulations are prepared.

Obtain information on quality of education (Butler)

If guidelines on what is meant by "quality of education" can be prepared, and if they prove amenable to the Census Bureau's survey resources, we would certainly consider this subject as a potential for investigation.

Take annual or biennial national consumer surveys to obtain more comprehensive data on consumer expenditures, saving, and income (Ferber)

In connection with its surveys of consumer buying intentions, the Bureau is obtaining more detailed economic information from consumers. This work is still in the experimental stage, but eventually it may lead to periodic statistics on consumer expenditures, saving, and income.

Obtain a comprehensive and continuing picture of the behavior of consumers by collecting data at regular intervals for long periods from panels of them (Ferber, Friend, Orcutt)

The proposal to establish continuing population panels for periodic surveys—i.e., "longitudinal" studies—is one which the Census Bureau has had on its list of proposed projects for a number of years. This is a fairly expensive undertaking but it is hoped that financing is not too far in the future.

Develop data to show education and income relationships (Stein)

The reports in volume II of the 1960 Census of Population provide cross-tabulations of income by education. We should like to have specific suggestions on what further cross-tabulations would be useful.

Build into 1970 census a program to provide data to users on a fee basis
(Stein)

The Census Bureau is making an extensive effort to determine the needs of its data users, and this is a keystone to the planning now underway for the 1970 census. A specific point is made in the Bureau's requests for this kind of information that special needs for tabulations, which the user recognizes cannot be made part of the standard reports, also be communicated to us within the next year or two. This is in order that we can adjust our processing procedures to provide such special data as cheaply and rapidly as possible. Several million dollars worth of special work has been done utilizing the 1960 census data on a fee basis, and in anticipation of even greater demands on the 1970 census, the Census Bureau wants to set up its machinery to do this work most efficiently for all concerned.

In consumer surveys covering life insurance, give more consideration to explanation of insurance data (Holran)

This recommendation will be kept in mind in the planning of pertinent surveys in the future.

Take quinquennial census of population (Notestein, Kruse, Barnathan, Cleveland, Hamburg).

The proposal for a quinquennial census is currently before the Congress. The Bureau has expressed a readiness to take such a census if directed by the Congress to do so.

Provide more data for States, standard metropolitan statistical areas, counties, or cities (Coale, Copeland, Ferber, Ferguson, Gershenson, Hamburg, Jaffe, Koponen, Kruse, Mandel, Plain, Roche, Sholes, Stein)

The Census Bureau has a small program to provide technical assistance to State and local governments to help them make effective use of the statistics already available and also to help them develop their own statistics. The Bureau has prepared a manual, available to local governments on request, on methods of making population estimates for local areas; periodically, it compiles and publishes a list of all agencies that make population estimates.

A research program, now in progress at the Census Bureau, is aimed at using administrative records to develop population and income estimates for counties. This work, which is being carried out in cooperation with the Internal Revenue Service, eventually may lead to annual figures on county population, income, and migration.

Some local area data will be obtained from the statistics that will be collected for the Office of Economic Opportunity in the spring of 1966. Proposed work in cooperation with the Bureau of Employment Security may provide data for some Standard Metropolitan Statistical Areas.

The Bureau is developing greater flexibility in geographic coding to make possible new geographic delineations. It is well along with plans to code some 40 million addresses so that the 1970 decennial census data can be extracted from tapes and compiled by any number of different geographic areas. Specific suggestions for increased detail over the 1960 census published material should be sent to the Census Bureau within the next year or two to be incorporated in the 1970 census reports.

A program of periodic large-scale sample surveys could provide a great deal of useful information, but there are serious limits to the amount of geographic and cross-classification detail that could be obtained without increasing the sample size to where it approaches census coverage. In the sense that different data needs may be involved, the census and sample survey are not interchangeable. Moreover, a large-scale annual expansion of the Current Population Survey has been proposed from time to time but funds for such an effort have not been made available.

TRANSPORTATION

Coordinate Federal transportation statistics, avoid duplication, and fill gaps (Barber, Ferber, Gould)

The Census Bureau's policy is in complete harmony with this objective. More specifically, its transportation statistics program is designed to make maximum use of tabulated data and raw data available from other agencies, and the Bureau is coordinating the various aspects of its program with related activities of other agencies. The collection and tabulation of new data by the Bureau are being limited to the filling of gaps of major public interest, without avoidable duplication. The Bureau's policy extends beyond the Federal level to include data from all sources—State and local government agencies, nonprofit research groups, and private organizations.

We should be pleased to take part in any effort to improve the effectiveness of programs toward this end.

Appoint committee of experts to reappraise Federal Government program for transportation statistics (Barber)

The Bureau endorses the proposal for appointing a committee of experts to reappraise the Federal program for transportation statistics. The present situation is especially favorable for action by this group. The transportation data situation has changed greatly in the last few years. Extensive new data have become available. Recognition of need for more adequate statistics has risen sharply. The committee could be helpful in bringing the response by statistical agencies into line with public needs.

Coordinate statistics on passenger travel and commodity shipments (published by regulatory agencies) for States and local areas (Ferber)

The objective of this proposal is clearly in the public interest. While efforts by the Bureau of the Census to reconcile and combine transportation data from State and local sources have not been fruitful, it is quite possible that significant benefits could be achieved by cooperative action on a broader base.

WEALTH

Develop statistics on national wealth (Burns, Goldsmith, Harding)

As was indicated in testimony on June 30, 1965, before the Subcommittee on Economic Statistics of the Joint Economic Committee in its hearings on the wealth inventory planning study, the Census Bureau staff has participated actively, both on the advisory committee and the 14 working groups, in preparing the 1964 wealth inventory planning study at George Washington University.

In carrying out its assignment by the Bureau of the Budget of "focal responsibility * * * for undertaking the pilot and feasibility work on how the requisite data should be collected," the Census Bureau is now working closely with the Office of Business Economics, which was assigned the "focal responsibility * * * for planning the basic features for the development of official statistics of the Nation's physical wealth."

GENERAL

Usefulness of the data

Appraisal and reappraisal of various Census Bureau programs and concern for the usefulness of the data published have consistently been Bureau policies. We will continue to make periodic reviews and to encourage independent appraisals. We agree that more needs to be done to measure the value and usefulness of the data and have begun some exploratory research into this problem.

On the suggestion that the Government provide basic statistics of broad general interest to many different users and let private agencies provide the data that are primarily for the benefit of the few, the Census Bureau does, in fact, direct its program primarily to providing basic statistics of broad general interest. However, in collecting and processing such data, we have available so many data that are of interest to special groups that we see an obligation to put them in such form that they are available at a reasonable cost.

Preparation of data guides

We agree with the suggestions that urge better indexing of publications and guides to available data. We have published a "Guide to Census Bureau Statistics" and have taken on the task of updating the 1962 "Directory of Federal Statistics for Metropolitan Areas," issued originally by the Advisory Commission on Intergovernmental Relations.

To make users more aware of the data currently becoming available, we issue a quarterly Bureau of the Census Catalog, which now contains a section on unpublished data. In addition, we have developed programs to obtain a much wider distribution of census publication program notices, to increase substantially our press release series, and to promote publication of more papers and articles by professional staff members.

Receiving and providing data in machine-readable form

The references to expanded uses of electronic data processing equipment and of machine-readable data, both for source data and for data to be disseminated, represent, for the most part, objectives toward which the Bureau of the Census is moving.

We now make extensive use, and hope greatly to expand this use, of records on magnetic tape suitable for computer input as sources for census data. We have developed and continue to encourage the further development of uses of census data supplied on magnetic tape to business, academic, and other statistics users. We would urge, as well, maximum feasible use of computer processing technology to classify, index, and otherwise facilitate uses of Federal statistical data.

Central data source

There are two suggestions we consider to be either far in the future or possibly unfeasible in the absence of either improved technology or improved proper definition and specification. These are:

Establishment of a network of computer centers to collect data at the local level and send them to a central Federal headquarters.

Establishment of a national data library computer center to store data and facilitate their rapid retrieval.

The former suggestion assumes a common pattern of purpose and form for the collection of statistical data that does not exist, and that local preprocessing of such information prior to transmittal to a central point offers economic and procedural advantages; we know of no convincing evidence concerning this. The latter suggestion assumes that the concepts of information, classification, and indexing have been developed to the point at which it is possible to apply them to general statistical material and implement automated systems for handling the receipt, classification, storage, searching and abstracting, retrieval, and dissemination of such data. Although effective systems have been developed in very restricted environment (as to content or as to function), we believe that a great deal of definitional and developmental research and experimentation will need to be done before a cost-effective general-purpose data storage and retrieval system is a practical concept.

Providing data for small geographic areas

In recognition of the growing number of requests for data related to small areas, we have formed an Advisory Committee on Small Area Data. This committee is composed of a vigorous group of users and should help the Bureau in its efforts to provide more detailed statistics for small areas.

The Bureau's program for future censuses will provide greater flexibility in geographic coding and make possible new geographic delineations and also maintain continuities with old ones. In fact, the Bureau is well along with plans to code some 40 million addresses so that the 1970 decennial census data can be extracted from tapes and compiled by any number of different geographic areas.

The proposal to use ZIP code areas as fundamental geographic areas needs clarification and justification. It is not clear that any particular purpose would be served by following this proposal, and it is clear that we must recognize many other areas, both administrative and statistical.

Federal-State cooperation in developing statistical series has been receiving some attention. Although this is not primarily a Census Bureau responsibility, we would throw our full support behind such a movement. We have recently begun a small program to further the coordination of State and Federal statistical programs and hope to expand it. It must necessarily be a long-range goal since, among other problems, it involves getting local agencies to apply uniform terms and concepts.

Improving timeliness of reports

The Census Bureau uses a number of devices to release its statistics as early as possible. Among these are: early planning of censuses and

surveys, collecting the data as fast as possible by encouraging respondents to report promptly and permitting them to make estimates, arranging for certain respondents to report unusually early to provide data for a report that gives an early indication of the direction of change, imputing data for late respondents if necessary, using sampling wherever possible to reduce the number of reports to be collected and processed, using fast electronic equipment to process the data and prepare the reports for publication, issuing some reports in preliminary form, and making special preparations for printing.

Two improvements in printing arrangements were made recently. The Government Printing Office arranged contracts which provided for printing the preliminary reports of the economic censuses in 3 to 5 days, the smaller final reports in 2 weeks, and the larger final reports within 30 days. To expedite the printing and distribution of all reports, the Bureau requested establishment of a printing plant at its Suitland headquarters; instead, the Joint Committee on Printing directed the Government Printing Office to establish a contract for printing Census Bureau reports that would provide printing service comparable with that which could be expected if there were Government-owned facilities at the Bureau headquarters.

Revising industry and commodity classifications

Revising industry and commodity classifications is, of course, the responsibility of the Bureau of the Budget. It will, no doubt, as it deems appropriate, ask the Interagency Technical Committee on Industrial Classification to review some of the recommendations for revision. In fact, some of the suggested revisions have already been considered by that committee. Following are some comments on specific suggestions:

Combine standard industrial classification (SIC) groups to get meaningful statistics (Backman)

Mr. Backman states that in Statistics of Income, 1961-62, Corporation Income Tax Returns, the Internal Revenue Service "attempts to classify corporations within the framework of SIC but only succeeds in obtaining meaningless totals." He cites as examples SIC groups 281, industrial inorganic and organic chemicals, and 282, plastics materials, synthetic resins, synthetic rubber, synthetic and other manmade fibers, except glass.

We would point out that, as Mr. Backman suggests, SIC groups 281 and 282 are combined into a single classification in the Census Enterprise Industry Classification for 1958 and 1963. This is in line with the criterion that in an enterprise industry classification, the enterprise should, to a significant extent, be engaged or specialize in the activities defining the industry. For SIC 281, the enterprise specialization ratio (based on number of employees) was only 48 percent in 1958; that is, less than half the employees for that industry were in establishments primarily producing industrial organic and inorganic chemicals. For the combination of SIC 281 and 282, the enterprise specialization ratio was 65 percent.

It should also be noted that IRS currently uses the Standard Enterprise Industry Classification, tentatively promulgated by the Bureau of the Budget in 1962, which also distinguishes between industries 281 and 282 for enterprises. At present, the Census Bureau is review-

ing the SEIC in the light of the facts available from its enterprise statistics programs of 1958 and 1963.

Find meaningful definitions of industries (Butler)

The definitions of industries for establishments (SIC) are evaluated after each quinquennial census to determine whether the classifications satisfy certain basic criteria (economic significance, industry specialization, and industry coverage). Specialization and coverage ratios reflect the extent to which establishments are engaged in and cover the activity defined by the industry. The classifications for enterprises are broader than those for establishments because of the greater diversity of enterprise activities. Just as the meaningfulness of the SIC for establishments is evaluated by the establishment statistics in the quinquennial census, so the meaningfulness of the enterprise industry classification is evaluated from the quinquennial census enterprise statistics.

Coordinate classification and coding of products and commodities in the different census programs and in the various Government agencies (Walsh)

In this connection, we might mention the newly revised (1964-65) Census Bureau commodity classifications for foreign trade statistics. Export classifications were created to provide comparability both with the international trade of other countries (SITC) and with the production statistics of the domestic economy (SIC). Import classifications, although based on the U.S. tariff, have been adapted to meet similar needs.

Provide a high degree of international comparability to make data most useful (Morgenstern)

As indicated above, international comparisons of U.S. foreign trade statistics have been facilitated in the new Census Bureau export and import statistical commodity classifications.

Comparison of the U.S. standard industrial classification (U.S. SIC) with the international standard industrial classification (ISIC) are presented in the recently issued Census Bureau Technical Paper 14, *The International Standard Industrial Classification, and the U.S. Standard Industrial Classification—A Comparison With Particular Application to the Bureau of the Census*.

In 1965, the Bureau of the Census published Working Paper No. 20, "Industry Classification and Sector Measures of Industrial Production," by James W. McKie of Vanderbilt University. The report, which was supported by a grant from the Committee on Analysis of Census Data of the Social Science Research Council, is a critical assessment of the manufacturing division of the Standard Industrial Classification, particularly with regard to its adaptability to the requirements of diverse users of economic data. The concepts underlying the SIC are discussed and the various bases of classification (similarity of products, materials, processes, and/or end use) are analyzed.

Reducing burden on respondents

The Bureau maintains internal controls to assure itself not only that each project can be justified before the Office of Statistical Standards, but that it is a practical undertaking in terms of all technical considerations, specifically including respondent burden. The Bureau does not

rely solely on the advice of its staff but has for many years consulted on program needs with advisory committees representing every segment of the population and economy. As standard practice, the Bureau designs forms and procedures in consultation with the respondents or their representatives, giving special consideration to the respondent's ability to supply the information.

The Bureau has pioneered in developing methods to reduce the reporting burden on the public. Some of these are:

(a) *Obtain information from existing public records.*—The Bureau has placed considerable emphasis on the use of the administrative records of other Government agencies, and greatly reduced the reporting burden on small business firms. For the 1963 economic censuses, the Bureau obtained statistics on 1,200,000 small firms directly from income tax returns; for the 1967 economic censuses, it plans to obtain them in this way from 1 million more small establishments. Similarly, data for "county business patterns" are obtained from records of the Social Security Administration. The Bureau is continuing its research into the possibilities of expanding the use of administrative records of other agencies in lieu of direct collection wherever possible.

(b) *Use sampling and cutoffs wherever possible.*—The application of scientific sampling methods to census data collection is perhaps the most significant development of this century insofar as reducing respondent burden and costs is concerned. It is now used in the censuses and in nearly all of the current surveys. Further applications are being studied intensively and, without question, will be successfully developed. In the current surveys, it is usually possible to apply lower sampling ratios to the smaller establishments, which are more numerous than the larger ones but which contribute less to the production or sales totals. In some cases, it is possible to employ a cutoff technique and exclude the smallest establishments entirely from the survey.

(c) *Rotate small businesses that report in a sample survey.*—Small businesses may be rotated in a sample so that no one businessman carries a heavy reporting burden. For example, the Bureau has designed the sample for the monthly retail trade report to include 12 different groups of small businesses; each group, then, reports only 1 month during the year.

(d) *Use differential frequency of reporting.*—In some surveys it is possible to obtain reports from small establishments at less frequent intervals than from larger establishments. The small establishments may report only for the annual survey while the larger ones report monthly or quarterly.

(e) *Tailor reporting requirement to respondent's circumstances.*—In early censuses, respondents were required to select from a long list of inquiries the particular questions applicable to their operations. In order to simplify reporting, the Bureau developed the practice of "tailoring" questionnaires to ease respondent burden. For example, the 1964 Census of Agriculture questionnaire was developed with 43 regional variations, so that products not likely to be produced in a particular area were not listed on the questionnaire for that area. This greatly simplified the understanding of instructions and resulted in some reduction in the overall reporting burden.

In a similar manner, forms used in the 1963 economic censuses were tailored insofar as practical to the circumstances of each industry or kind of business, to avoid questions not pertinent to them. Furthermore, the 150,000 smallest industrial establishments (half the total number) were sent only short forms.

(f) *Spread the reporting burden.*—To spread the reporting burden, the Bureau collects some census information in the year before the general collection, or the year after. For example, in the 1963 Censuses of Manufactures and Mineral Industries, data on the distribution of petroleum products through bulk stations were collected in 1962.

(g) *Accept estimates where exact figures cannot be supplied.*—Through-out census data collection operations, provisions are made to permit respondents not having exact records to substitute reasonable estimates. The best judgment of the respondent is accepted unless it is obviously out of line with other facts bearing on the item. This results in a substantial reduction in reporting burden.

(h) *Allow additional time when respondents cannot complete census questionnaires on schedule.*—Many small businessmen do not have accounting staffs but depend on professional accountants for this work. If these accountants are temporarily swamped with work, the Bureau, on request, makes arrangements to accept delayed census reports.

(i) *Review reporting forms periodically to eliminate or simplify them.*—Over the past year, the Bureau has made a particularly intensive study of its reporting forms. As a result, it has eliminated 28 recurrent reports that required 212,000 responses per year and simplified 31 recurrent reports that involved 1,503,000 responses per year.

In addition, the Bureau expects that in October an order will be issued eliminating the requirement for filing shippers' export declarations for shipments under \$100 to Canada and to U.S. possessions. This represents the completion of a project that the Bureau has worked on with the Office of Export Control. Elimination of this filing requirement will reduce respondent burden by approximately 1 million forms annually.

One statistician (Watkins) stated that we can and must seek to minimize the burden on respondents, taxpayers, stockholders, and consumers. He emphasized, however, that the successful functioning of the American economy is dependent on good management, both public and private; and good management must rest on accurate and prompt information on the state of the economy. Civilization carries a price tag and there is no way to eliminate the burden of time and cost involved in the maintenance of a system of essential economic intelligence. Efforts should be made to protect that system. The Census Bureau endorses this statement.

BUREAU OF LABOR STATISTICS

U.S. DEPARTMENT OF LABOR,
BUREAU OF LABOR STATISTICS,
Washington, D.C., September 14, 1965.

Mr. RAYMOND T. BOWMAN,
*Assistant Director for Statistical Standards, Bureau of the Budget,
Executive Office of the President, Washington, D.C.*

DEAR MR. BOWMAN: In answer to your request of August 6, I am enclosing comments of this Bureau regarding the recommendations for improved statistics which are included in the recent compendium of the Joint Economic Committee, "Improved Statistics for Economic Growth."

We have not attempted to comment on every single reference to statistical programs conducted by this Bureau. On the other hand, we have attempted to provide you with our reaction to the major points, particularly those that appear in more than one statement.

Sincerely,

EWAN CLAGUE, *Commissioner.*

Enclosure.

COMMENTS OF THE BUREAU OF LABOR STATISTICS REGARDING PROPOSALS INCLUDED IN THE JOINT ECONOMIC COMMITTEE COMPENDIUM, "IMPROVED STATISTICS FOR ECONOMIC GROWTH"

GENERAL COMMENTS

Timeliness of statistics

Scattered throughout the recommendations are comments on the desirability of rapid publication of the statistics to enhance their usefulness to industry, the public, and the Government. The question of speed in reporting is a constant concern of the Bureau of Labor Statistics. We believe we have achieved a good record, particularly in our monthly statistical programs. The monthly report on employment and unemployment based on the Current Population Survey conducted for the Bureau by the Bureau of the Census is released in the third week following the week to which the data refer. The monthly report on payroll employment, the data for which are collected by 50 cooperating State agencies (which use these reports also as the basis for State and area statistics), is released by the Bureau 4 weeks after the week to which the data refer; the State agencies publish within 3 to 6 weeks after the date of reference. The monthly reports on the Consumer Price Index and labor turnover are released within 4 weeks after the end of the month to which they refer. We are constantly trying to improve and streamline collection, tabulation, and analysis procedures to speed up reporting without sacrifice of the accuracy of the data.

Seasonal adjustment of data

Herbert R. Brinberg has urged that major monthly series be adjusted for seasonal variation.¹ Of course, many BLS series are adjusted seasonally and similar adjustments will be made to additional series in the future. Special mention is necessary for the Bureau's price indexes. While the Bureau has decided not to adjust its Consumer Price Index and Wholesale Price Index for seasonality, we do plan periodically to update our seasonal factors for these indexes and selected components so that users can make their own analyses or adjustments.

Descriptive nontechnical literature

We are aware of the need for descriptive nontechnical literature, as suggested by William Butler.² We are constantly trying to develop greater understanding by the public of the methods and purposes behind the regularly published statistics. Special publications are currently available regarding the meaning and preparation of the monthly figures on employment and unemployment and the Consumer Price Index. We have in preparation a comprehensive bulletin on the CPI which will describe the revised index, its history, and its

¹ Improved Statistics for Economic Growth: A Compendium of Views and Suggestions From Individuals, Organizations, and Statistics Users. Publication of Subcommittee of Economic Statistics of the Joint Economic Committee. July 1965. P. 11.

² Op. cit., p. 16.

procedures. We believe this will fill a basic need for descriptive information.

Greater Federal-State cooperation

Reference is made in these comments to the need for improved Federal-State cooperation to minimize the reporting burden on respondents. A number of the BLS programs, particularly the payroll employment data, are collected with the cooperation of State agencies. In our work-injury statistics, cooperative arrangements are already in effect in 13 States and this will be extended as additional resources become available.

SPECIFIC COMMENTS

Detailed employment and unemployment statistics for regions, States, and smaller areas

A dozen or so replies requested the Federal Government to provide current statistics for areas below the national level.³ About one-half were requesting a mid-decade census, if not in the 1960's, then certainly in the 1970's. In addition to population and housing counts, various other social and economic data—such as labor force, occupation, income, education, and the like—were listed as needs.

Another approach to obtaining more detailed information for the Nation and for specific areas was the proposal to expand the current monthly sample of 35,000 households, in one suggestion, to as many as 1 million households once a year.⁴ This, of course, would be a very costly operation which would be difficult to staff for and operate on a one-time basis. A large enough sample to supply State and selected metropolitan area data each month would also be costly. The Department of Labor has been appropriated sufficient funds to expand the 35,000 household sample by 50 percent, but this is not enough for State data. Some alternative approaches to a mammoth expansion, such as cumulation of monthly or weekly data for an annual average, might provide better data at a more reasonable cost.

A cooperative program of Census Bureau, Bureau of Employment Security, and the Bureau of Labor Statistics has already been developed. It will provide annual average labor force data for a small number of metropolitan areas in calendar 1966.⁵

A number of suggestions referred to the need for more area data on employment, hours, earnings, and economic activity, such as can be obtained from reports of establishments.⁶ Employment data are one of the most useful current economic measures for areas. The State agencies cooperating with the Bureau of Labor Statistics now publish employment statistics currently for all States and for 163 of the approximately 227 standard metropolitan statistical areas, and labor turnover statistics for all States and 116 areas. The Department of Labor's program calls for extending these measures to all standard metropolitan areas as soon as possible; funds appropriated by the Congress over recent years have already made possible a substantial expansion. The extent of coverage of the areas in each State and the degree of industry detail available on each area are shown in the Bureau of Labor Statistics' summary publication, "Employment and

³ Op. cit., pp. 6, 21, 39, 62, 79, 93, 101.

⁴ Op. cit., pp. 22, 47, 79.

⁵ Op. cit., pp. 19, 23, 36, 61-62, 118.

⁶ Op. cit., pp. 6, 39, 47, 61-62, 64-65, 118.

Earnings Statistics for States and Areas, 1939-64" (BLS Bulletin No. 1370-2).

Additional detail on the unemployed

Several persons requested that the unemployment figures be disaggregated to show unemployment among adult males, for example, or the educational level of the unemployed.⁷ These statistics are published now, either monthly or once a year. Efforts will be made to increase public awareness of their availability and significance.

Another request was for information to measure how seriously the unemployed were looking for a job. Experimentation with a question on what steps were taken to look for work gives promising results. Perhaps additional measures of intensity can be developed. A monthly series on the number looking for part-time work is prominently featured in the press releases and reports of the Bureau of Labor Statistics.

Accuracy of the statistics

In the published reports on employment and unemployment tables of sampling errors of the data are included, and these are taken into account in preparation of analytical text.⁸ Despite these, however, and repeated statements at press conferences about the lack of significance of small differences, the press continues to take small changes literally. Some progress has been made in their education, but it is a difficult job.

Definition of unemployment

Probably no universally satisfactory definition of unemployment can be devised.⁹ The present concepts and definitions were thoroughly reviewed by the President's Committee to Appraise Employment and Unemployment Statistics in 1962. In general, they were approved, but recommendations to sharpen their measurement and increase their objectivity were made by the committee. Work has been going on for the past year to meet this objective.

Reconciliation of household and payroll estimates of nonagricultural employment

It has been suggested that the two major estimates of employment published by the BLS be reconciled annually and that a "best guess of a correct total figure" be provided.¹⁰ As a result of the present research on employment and unemployment measurements, there is promise that some of the gap can be closed by obtaining a better estimate of self-employed workers whose numbers are exaggerated at present in the household survey. However, reconciliation can at best be only approximate, since the sources of the two sets of data are so different, and the effect of sampling errors cannot be eliminated. We do not believe that a synthetic estimate of the total, as a "correct" figure would have much justification or utility.

Employment, hours, and earnings statistics at a national level

A number of comments referred to the need for extending statistics on employment, hours, and earnings to more industries, particularly

⁷ Op. cit., pp. 30, 34, 70.

⁸ Op. cit., pp. 98, 116.

⁹ Op. cit., p. 119.

¹⁰ Op. cit., p. 23.

among the services and other sectors outside of manufacturing.¹¹ The Bureau has been concerned about the need for extension of the program to additional industries, and has developed a program calling for a substantial expansion in the reporting sample, yielding both improvement in sample design and improved coverage of the small establishments characteristic of service industries. Congress has appropriated funds for this purpose; and in the present year 35 new nonmanufacturing industries will be published. These help to round out the coverage of the hours and earnings data, so that we will begin publishing totals for two additional industry divisions—trade and finance—beyond those we now publish (manufacturing, mining, and construction). The remaining divisions are services, government, and transportation and public utilities. As the program develops, and with additional support from the Congress, the Bureau will add more monthly series on industries in the services, trade, finance, and transportation and public utilities.

In addition to these monthly series, the Bureau also publishes estimates of employment for 1 month in each year (March) in 210 additional industries, of which half are outside of manufacturing, including 47 in services, 24 in trade, and 14 in transportation and public utilities. While not as valuable as a monthly series, these annual series do provide information on the trend and level of employment.

Job vacancy statistics

The need for statistics on job vacancies was the most frequently mentioned of any of the items falling within the purview of the Bureau of Labor Statistics.¹² These comments referred to the potential use of information on job vacancies as a measure of labor demand, for use in analysis of the character of the economic situation, particularly with reference to the light this information might shed on the question of the appropriate economic policies to follow in order to reduce unemployment without creating inflationary pressures. The use of job vacancy information in developing employment and training programs was also mentioned.

The Department has made pilot studies of the feasibility of collecting job vacancy information from employers and of the questionnaires and survey designs most appropriate for doing so. These studies clearly indicated that such a program is feasible. The Department is continuing to work on a number of problem areas, including the task of getting accurate occupational data for the vacancies, evaluating the data to determine whether jobs are vacant because of the wage rates or conditions of work offered, and the general problem of developing a survey system to provide the data at minimum cost.

Occupational employment statistics

A number of comments referred to the need for current statistics on the number of workers employed in each occupation.¹³ This would be valuable as an aid in projecting future manpower requirements for planning training programs; in measuring progress in providing increasing numbers of skilled workers; and in studying the effects of automation and other technological change upon the occupational structure and skill needs of industry.

¹¹ Op. cit. pp. 14-15, 59.

¹² Op. cit., pp. 3, 14, 17, 30, 35, 37, 71, 127, 130.

¹³ Op. cit., pp. 3, 17, 47, 84.

The Bureau of Labor Statistics now has a limited program providing monthly data on employment by major occupation groups and in a dozen very large occupations from the Current Population Survey, and annual data on employment, by industry, in scientific and technical occupations, derived from a survey of industry. A pilot study has been conducted looking toward the development of a comprehensive program of occupational employment statistics, and the Bureau is proposing expanded work in this area in its 1967 budget.

Retail prices and the Consumer Price Index

1. Retail prices collected by the Bureau reflect first-of-the-week and end-of-the-week specials. Although they are not combined specifically with relative weights, we believe the proportions of first-of-the-week and end-of-the-week prices are roughly correct. The criticism by W. E. Hamilton¹⁴ that BLS prices are not representative generally stems from a belief that the Bureau should shift its pricing to the particular cuts which are on special sale and should combine the different items with weights adjusted to the current sales pattern. This does not fit the basic definition of the index as price change for a fixed market basket. It should also be emphasized that the purpose of BLS price collection is for time-to-time measurement of price change. Publishing of average dollars and cents is a byproduct operation. If BLS price collections were oriented toward collecting representative prices, the sampling design would be different and we would need larger samples of outlets. It is unfortunate that the Department of Agriculture must rely on BLS prices for its market spread studies. It would be highly desirable for more funds to be provided for this purpose. Larger appropriations would improve the validity of available prices.

2. The criticism by Lester Kellogg¹⁵ that the CPI is inadequate as a retail price index probably relates to the fact that certain elements are included, such as property tax, water rates and the like which are not sold in retail markets. It probably also implies that individual items priced should be combined with sales weights. Such an index could be provided at moderately greater cost to supplement the CPI.

The criticism that separate city indexes may not be necessary and that regional indexes would be more helpful may be valid but it should be pointed out that with the index structured as it now is, the cost of city indexes is negligible. We are, however, considering the feasibility of a national and/or regional sampling plan for the next revision, approximately 10 years from now. If this proves feasible, it means that cities would be dropped as clusters for pricing.

3. Herbert Stein¹⁶ raises a question about the procedures for adjusting prices to adjust for changes in quality. No evidence has been presented and no actual study has been made to support the statement that 1 to 1½ percent of the rise in the CPI is due to failure to factor out quality improvement. No practical suggestions have been made for better ways of handling the quality problem. The Bureau is continuing to study the problem and a special research division has been set up, one of whose major functions is the study of quality adjustment. We are also attempting to analyze the makeup of the index to judge the possible direction of bias. The criticism

¹⁴ Op. cit., p. 69.

¹⁵ Op. cit., p. 85.

¹⁶ Op. cit., p. 130.

generally fails to consider BLS operating techniques, i.e., whether prices of noncomparable items are handled by linking or by direct comparison. The former tends toward a downward bias rather than an upward bias.

Consumer expenditures, incomes, and savings

There are numerous general references in this report to consumer income, expenditure, and saving data with respect to both aggregate time series and cross section survey sources which are pertinent to the BLS program. The BLS consumer expenditure surveys are specifically cited by Ferber;¹⁷ Friend;¹⁸ Holran;¹⁹ Houthakker;²⁰ and Powers.²¹ These specific references point up deficiencies in the cross section consumer expenditure data and in the Bureau's program in this area of which the Bureau has been very much aware for many years. In summary, they cite the need for a continuing program of consumer expenditure studies which will provide current information on a representative cross section national sample and longitudinal data for a continuing panel of families. The need for a continuing program of methodological research, particularly dealing with response errors and data collection methods is stressed by Ferber. Friend and Houthakker stress the need for analytical work, particularly directed toward bridging the gap between cross section and time series expenditure data and developing the ingredients for using these data in forecasting models. They indicate the need for interagency coordination and cooperation in this effort. Holran points up the need for more detailed information for a particular item—in her case, insurance—and in so doing voices the desires of users of our CES data in a wide variety of commodity fields. She points up the mutual advantages of cooperation between public and private research groups in developing and analyzing consumer statistics. Powers specifically states the need for making the detailed data available to non-Federal government analysts more quickly.

In a more general frame of reference, the need for more micro-economic data and analysis is cited by Orcutt;²² Gillen;²³ Gould;²⁴ and Neal.²⁵ The need for better access to the basic data, particularly by analysts outside the Federal Government, through special tabulations, distribution of basic data tapes, centralized data banks, and a "Federal information reservoir," is emphasized by Gillen;²⁶ Gould;²⁷ Toof;²⁸ Neal;²⁹ Orcutt;³⁰ and Schmidt,³¹ among others.

The Bureau, since about 1953, has been proposing the initiation of a continuing and comprehensive program of consumer expenditure surveys and analyses, directed toward both the substantive and methodological problems. Mr. Ferber's statement on the subject is, in effect, a summary and endorsement of a proposal for a continuing program of surveys of consumer expenditures which we discussed

¹⁷ Op. cit., pp. 34-37.

¹⁸ Op. cit., p. 45.

¹⁹ Op. cit., p. 75.

²⁰ Op. cit., p. 77.

²¹ Op. cit., p. 114.

²² Op. cit., p. 107.

²³ Op. cit., p. 49.

²⁴ Op. cit., p. 55.

²⁵ Op. cit., p. 131.

²⁶ Op. cit., p. 49.

²⁷ Op. cit., p. 55.

²⁸ Op. cit., p. 134.

²⁹ Op. cit., p. 133.

³⁰ Op. cit., p. 107.

³¹ Op. cit., p. 123.

with our CES Advisory Committee (of which he was a member) on November 16, 1962. This proposal with subsequent revisions and modifications, is the basis for this project in our current 5-year program.

A continuing program on consumer expenditures, incomes, and savings would contribute significantly to needs for information on the impact of fringe benefits, and on household inventories and other aspects of wealth inventory needs as cited by Backman,³² Burns,³³ Ferber,³⁴ and Glidden.³⁵

In order to make the basic data from our 1960-61 Survey of Consumer Expenditures more available to other Federal agencies and analysts outside the Government, we have provided unpublished data for the cost of reproduction; have furnished a detailed master data tape to other Federal agencies on a rental basis; and are currently preparing a general purpose family tape for sale to non-Government agencies. The experts, in citing the need for access to the basic data tapes, do not seem to realize the very substantial costs such a dissemination program involves, not only in preparation of the tapes but, more importantly, in terms of the consultation services needed for appropriate interpretation and use of the tapes. This should not be looked on as a simple and inexpensive solution to the problems.

Place-to-place differences in living costs and standard budgets

Specific requests for current information on place-to-place differences in living costs are made by Butler³⁶ and Gershenson.³⁷ Gershenson recommends that the City Worker's Family Budget be updated and "priced in as many cities as possible," and cites the needs for budgets for other family types.

Our request to initiate work on a 2-year program to revise the City Worker's Family Budget and the Retired Couple's Budget is now pending before Congress, having been originally proposed to the Budget Bureau in fiscal 1963.* The revised budgets would be priced in fiscal 1967 in 23 metropolitan areas and a sample of middle-sized and small cities in the four broad geographic regions. In view of the support for this program expressed by research groups in chambers of commerce of smaller cities throughout the United States, we can expect increasing demands for these data.

International pricing

Arthur F. Burns, Edward P. Rubin, and Herbert Stein emphasize improvement of price information bearing on the competitive position of the United States.

The National Bureau of Economic Research and the U.S. Bureau of the Budget have urged the Bureau of Labor Statistics to undertake this project, carrying on when the current NBER experimental project terminates. The Secretary of the Treasury and several offices in the Department of Commerce have urged us to proceed also, but resources have not been forthcoming. We are continuing to discuss concepts and longrun plans with the NBER.

³² Op. cit., p. 3.

³³ Op. cit., p. 15.

³⁴ Op. cit., p. 36.

³⁵ Op. cit., p. 51.

³⁶ Op. cit., p. 20.

³⁷ Op. cit., p. 47.

*NOTE.—This request has now been granted.

Additional pricing in the Government sector

Herbert Stein urges collection of additional data to permit measurement of price trends in the Government sector. Price movements of items purchased by Government are apt to differ from those on private markets and information in this area is greatly needed. The BLS budget for fiscal 1966 included a proposal to construct purchase price indexes for Government, but congressional approval was not granted.

Pricing in the service industries

Arthur F. Burns points out the dearth of information for this growing sector of the economy. The Wholesale Price Index is limited in concept to commodity pricing, but the service industries would be covered under the Bureau's new industry sector price index program in which expanded pricing of industrial output would be grouped according to the Standard Industrial Classification. Work on this program has been advancing slowly.

Prices and unit costs by industry

Arthur F. Burns points out the need for monthly or quarterly data on prices and costs for major industries. The BLS has instituted a program to produce price indexes of the output of industries as defined by the Standard Industrial Classification. Indexes of output prices for some 50 industries on an annual basis are available in the August issue of the Monthly Labor Review. It is planned ultimately to supplement these with indexes for other industries and to produce price indexes of materials purchased by industry.

This expanded program of industrial price statistics will prove of very great value in improvement of the price deflators for the gross national product—a purpose stressed by Douglas Greenwald.

This need has been recognized by the Bureau. One of the principal purposes of the new industry sector pricing program is to provide new and improved pricing for the national accounts. However, resources have not yet been made available to provide a means of expanding price collection for such a system.

Buyers' prices

Herbert Stein places high priority on an attempt to obtain actual prices paid by buyers, not the price supplied by sellers. The project has merit, at least on a selective basis, because it will enable a better evaluation to be made of price trends for industries characterized by complicated rebate and discount structures. The Bureau did conduct a study of this kind on steel prices some years ago. This would be a costly project but one which BLS has recommended for selected products for a number of years.

Fringe benefits

Both Jules Backman³⁸ and Arthur F. Burns³⁹ urge a regular statistical program measuring nonwage (fringe) benefits. Each expresses the desirability for annual data directly relatable to hours and earnings and in the same industrial detail as the monthly BLS series. Professor Burns also noted the absence of such data for nonproduction workers.

We agree with the need for expanding the statistics on nonwage benefits and for more regular reporting. In fact, we are working to

³⁸ Op. cit., p. 3.

³⁹ Op. cit., p. 15.

expand the present limited program in this area to encompass both regular collection and publication of fringe benefit statistics for the total economy and for a number of individual industries. We have also requested funds to permit the development of equally comprehensive statistics for nonproduction workers.

Productivity indexes

1. Several respondents recommended an increase in the number of industries for which productivity measures are provided (e.g., Jules Backman's comments and Arthur F. Burns' comments⁴⁰). We agree with this recommendation and in fact in the fiscal year 1967 budget requested additional funds to expand the number of industries for which productivity measures can be developed with a goal to develop measures for all industries which have 100,000 employees or more.

2. Suggestions were made for the improvement of construction statistics and one specific recommendation for the development of statistics on productivity in construction. (Joseph D. Keenan's comments.⁴¹) We have been concerned with this problem for some time. Our present work on the construction labor requirements studies is to some extent involved in recycling earlier studies in order to provide some insights into a productivity growth for various construction activities.

3. Two recommendations were for the development of measures of total factor productivity and capital productivity (compare William F. Butler's comment, p. 17, and R. A. Harding's comment, p. 70).⁴² At the present time, many problems, both conceptual and statistical, stand in the way of developing adequate measures of "total factor" productivity. In addition, there are questions of the usefulness of such a measure. The present state of statistics on capital and the limitations for capital measures leaves much to be desired before an adequate capital productivity measure can be developed. We agree with the suggestion that work should be done and information should be developed for improved capital data. We have devoted some resources to this work, and hope to do more.

Studies of technological change

Two respondents recommended expansion in the information on studies of technological change and the impact of technology on employment. We are currently expanding and updating our previous studies of technological trends in 36 industries to cover 40 industries, with much greater detail.

⁴⁰ Op. cit. p. 3 and p. 14, respectively.

⁴¹ Op. cit. p. 84.

⁴² Op. cit.

INTERNAL REVENUE SERVICE

U.S. TREASURY DEPARTMENT,
INTERNAL REVENUE SERVICE,
Washington, D.C., September 20, 1965.

MR. WALTER F. RYAN,
*Acting Chief, Office of Statistical Standards, Executive Office of the
President, Bureau of the Budget, Washington, D.C.*

DEAR MR. RYAN: I have asked the staff of the Statistics Division to review the Joint Economic Committee publication, "Improved Statistics for Economic Growth," with particular reference to the statistics we produce and those additional statistics which could be obtained from tax returns. Our comments are contained in the enclosed report, wherein we have grouped the suggestions for improving these statistics according to the organizational effort needed to produce final evaluations:

- A. Suggestions mainly requiring Statistics Division action.
- B. Suggestions requiring intraagency consultations.
- C. Suggestions involving interagency consultations.
- D. Suggestions that may call for basic research.

Most of the data we produce are a byproduct of the operations of the Internal Revenue Service—a situation which Senator Proxmire notes in his letter of transmittal. While this and the confidentiality of the tax return act as limiting factors on what we can do, we are anxious to make the most effective use of the data the taxpayer supplies and so avoid the necessity of another agency requesting similar information from the same respondent.

Sincerely yours,

VITO NATRELLA,
Director, Statistics Division.

Enclosure.

COMMENTS OF THE STATISTICS DIVISION, INTERNAL REVENUE SERVICE,
ON IMPROVED STATISTICS FOR ECONOMIC GROWTH.

A. SUGGESTIONS MAINLY REQUIRING STATISTICS DIVISION ACTION

1. *Timeliness of publications*

We are aware of the need to release our data at the earliest possible date. Two of our special releases—Selected Financial Data for business tax returns and Advance Data for individual tax returns—were specifically designed to supply a few items of data at an early date. We recently employed a consultant to review our entire statistics of income program for the twofold purpose of improving timeliness and content and currently are engaged in implementing the recommendations made to us. It should be kept in mind, however, that some of the lag between collection and publication of the data is beyond our control. For example, our corporation statistics for a particular tax year are based not only on returns with accounting periods coinciding with the calendar year, but also on returns with noncalendar year accounting periods. Although returns are due to be filed within 2½ months after the close of the corporate accounting period, many companies are granted extensions of time in which to file. As a result, some of the returns to be included in our report for tax year 1964 will not even be filed until March of 1966. Nevertheless, data from these returns are included in our Selected Financial Data for 1964, which is scheduled for release the end of April 1966.

2. *Special compilations of data from tax returns and release of unpublished data for statistical purposes*

Under the terms of sections 7515 and 7809 of the Internal Revenue Code, as amended by Public Law 87-870, we have continued to undertake special studies on a reimbursable basis. During the 1965 fiscal year, 13 projects were completed with the estimated cost ranging from \$200 to \$17,000. The major users have been other Federal Government agencies, State and local government agencies, universities, private individuals, corporations, and research organizations. Included in these studies was a pilot project linking Internal Revenue Service (IRS) and Social Security Administration records which had as its purpose exploration of the use of tax return data to study the operation of the social security law and obtain information on the economic status of beneficiaries. In addition, 72 requests for material from our "Source Book of Statistics of Income" were filled.

During 1965, we made available for sale for the first time copies of our tax model tape files. The tape file for the 1962 individual income tax return model can now be purchased for approximately \$350.

As to the wider use of tax return tapes by Government agencies, we recently concluded an agreement with the Census Bureau involving the use by Census of IRS processing tapes which contain social security numbers and taxpayer addresses, as well as substantive

information. The agreement provided that the tapes remain in the custody of the IRS and that selected items of data desired by Census would be run off on Census tape under IRS supervision. This agreement represents one method of releasing tax return data to other Federal agencies that wish to use these tape files for statistical purposes. Safeguards are provided to prevent disclosure of data from individual returns.

3. *Panels of identical taxpayers*

We are presently doing exploratory work to evaluate the improvement in measures of year-to-year change obtained by using tax return panel data. At our last Treasury-IRS committee meeting, the results of an exploratory study involving approximately 850 individual income tax returns filed by taxpayers in the Baltimore district office for income years 1962 and 1963 were discussed. We indicated that we would investigate the possibility of incorporating a modest-sized panel into the statistics of income sample for individuals sometime in the future. The work we have done with panels of corporations has been less promising. Due to consolidations, mergers, firms going out of business, etc., it does not appear that it would be feasible for us to produce panel data for corporations.

4. *Data on common ownership and/or control of businesses*

Our Corporation Income Tax Returns Report for 1961 provides (a) detailed income statement-balance sheet information for consolidated returns, and (b) limited information for returns indicating 50 percent or more of their stock as being owned by one stockholder. Statistics now in preparation for 1963 will include data on corporations that own 50 under 80 percent, or 80 percent or more of another corporation, and also information on corporations that are owned 50 to 80 percent, or 80 percent or more by another corporation, individual, partnership, trust, or association.

As a result of changes in the tax law resulting from the Revenue Act of 1964, there probably will be some increase in the number of consolidated returns. Our corporation report for 1964 will contain data for newly consolidated returns in addition to the regular data for all consolidated returns. The 1964 law change also affects controlled groups not filing consolidated returns, and our statistics will include information on them indicating whether or not they were members of a parent-subsidiary group, a brother-sister group (owned by an individual), or a combination of the two.

Other statistics in our corporation reports also provide measures of degree of control—e.g., personal holding companies, and small business corporations electing to be taxed through shareholders. With regard to foreign holdings, we plan to publish limited statistics on controlled foreign corporations (50 percent owned by domestic corporations).

In commenting on the need for data on common ownership and/or control, it was noted that better data are needed on profits, corporate equity, and the number of independent business firms by size. The financial statistics for consolidated returns, referred to above, are also provided for all corporation returns. In addition, IRS is the only source for the entire unincorporated business universe. Our data for sole proprietorships and partnerships include such financial information as receipts, profits, inventory valuation methods, income statements, and for partnerships—balance sheet information. Classi-

fications are provided by industry, size of business receipts, size of profit or loss, and for partnerships and corporations by size of total assets.

5. *Statistics on profits*

The comment that "Changes in depreciation and other provisions of the tax law make it difficult to compare profit statistics for two time periods * * *" is on the whole true. However, we do publish statistics which provide an indication of the effect of tax law changes, e.g., the planned publication in our corporation income tax returns report for 1962 of tables showing the use of guideline depreciation. In addition, the effect of these changes often takes place over a considerable period of time, e.g., even as late as tax year 1959, taxpayers were still choosing straightline depreciation as the predominant method rather than the accelerated methods first authorized for 1954. When there is a change in the law, we attempt to produce data showing the effect of these changes, whenever possible. In addition, all of our reports contain sections dealing with changes in the law.

B. SUGGESTIONS REQUIRING INTRA-AGENCY CONSULTATIONS

1. *Geographical area data*

Data by geographical area are part of the statistics of income program and will be continued and expanded where possible in the future. We plan to publish limited data for individual returns by States each year and for the 100 largest standard metropolitan statistical areas (SMSA's), every other year. For corporations, we plan to tabulate some data for Internal Revenue districts and regions also every other year, although the limitations for most of the data are obvious. For sole proprietorships and partnerships, we plan to publish data for selected industrial groups for Internal Revenue districts and States several times in the next 5 years. In the statistics of income program we are, of course, limited by the fact that our sample is designed primarily for national estimates. However, we are providing detailed statistics from individual tax returns to a number of State governments on a reimbursable basis.

Several contributors stressed the need for county data. For the most part, the statistical sample used for statistics of income would not be adequate to obtain such small area data. We are presently conducting two pilot studies for individual tax returns exploring the use of the master file of tax returns for statistical purposes. These studies, which relate to sampling from the master file and producing statistics of income from the master file, could in time enable us to produce some key data by small areas. In making plans to produce more area data we will, of course, want to consult with the other interested agencies at the appropriate time.

Another method of geographical classification discussed is the use of ZIP codes. The master file does contain the ZIP code of the taxpayer and consequently it would be possible to use the ZIP code as a method of obtaining local area data. We are exploring the possibility of using ZIP codes to define geographical areas in statistics of income; i.e., as a way of defining SMSA's, and the ZIP codes could eventually be used to define a variety of geographical classifications. The ZIP code appears to offer a more practical and flexible way for machine tabulation of geographical area data.

2. *Data on tax withholding*

As the IRS makes increasing use of the automatic data-processing system in day-to-day operations, we may expect to enrich the stock of these statistics relative to economic growth. Improvements will undoubtedly be possible on many fronts. One suggestion—that the IRS utilize the Form 941, Employers' Quarterly Federal Tax Return, to build measures of income by county or other measure of local area on an annual, or, perhaps, a quarterly basis—must be evaluated for priority. I am sure that the IRS would want Budget Bureau guidance regarding the priority to assign demands for improvements in the statistics that might be placed on the expanding system.

3. *Public release of tax collection data by liability year*

It was noted that data on tax collections according to the period when the tax liability was incurred is available for internal use in the Treasury Department, and it was suggested that this be made available to the public as it would be very helpful in analyzing economic data. This refers to our S-2 report, "Collections from Selected Classes of Income Taxes Distributed by Liability Year," which is prepared for official revenue estimating purposes and is used for this purpose by the Office of Tax Analysis. The report is presently distributed to such Government agencies as the Bureau of the Budget, Council of Economic Advisers, Department of Commerce, Federal Reserve Board, and to the Joint Committee on Internal Revenue Taxation. Any decision concerning its release to the public would have to be made by the Office of the Secretary, Treasury Department. It should be pointed out that the data do contain an element of estimating—some of the data have to be prorated among the various tax liability years. Although the users in the Federal Government are aware of this, it may be preferable not to release these data to the public.

C. SUGGESTIONS INVOLVING INTERAGENCY CONSULTATIONS

1. *Reconciliation of statistics of income data with national accounts data*

The fact that the income data in the statistics of income reports are conceptually different from the national accounts data was noted. It was stated that these differences are comparatively minor, that it would be perfectly possible to relate these data to the published data in the national accounts, and that such a reconciliation would greatly increase the usefulness of data from tax returns and provide a check on the national accounts data. Some work is being done in this area. For example, the Office of Business Economics publishes a reconciliation between corporate profits shown by IRS and its figures on corporate profits and dividends. We would be happy to participate in a task force devoted to further work in reconciling our data with those of the Office of Business Economics or any other agency.

2. *Differences between farm statistics of the Department of Agriculture and IRS*

We are aware of the fact that differences exist between our statistics and those of the Department of Agriculture and concur in the comment that this primarily results from differences in the purposes of the data collection. We have taken some preliminary steps to study these differences, and as a matter of fact, at the request of the Depart-

ment of Agriculture, we have devised tables for tax years 1962 and 1963 which measure the relationship of income from farming to income from other sources for individuals filing a farm schedule (i.e., schedule F, form 1040). Preliminary discussions have been held for the purpose of including some of our statistics in the published reports of the Department of Agriculture.

3. National census of wealth

We participated in three of the working groups studying a possible national wealth inventory. Based on the principle that wherever possible an inventory should be undertaken by expanding or revising existing collection procedures rather than by setting up entirely new procedures or by assigning responsibility to a different agency than the one already collecting balance sheet data with that particular sector, it was recommended that the IRS participate in three principal areas—(1) Nonfarm business financial claims; (2) finance, insurance, and real estate; and (3) services.

In the corporation area, we already collect balance sheet information for the entire universe, and therefore this would be part of our program for the census year. It would, however, probably be necessary to make some provision for obtaining additional detail on the balance sheet for that year. In the case of partnerships, less than one-half of them currently file balance sheets for their returns, although these partnerships account for about 70 percent of the business receipts of all partnerships. This area requires further study to determine whether it would be feasible for us to obtain balance sheet data for the entire partnership universe for the census year.

Since the statistics of income reports are currently the only source of wealth data for the finance, insurance, and real estate sector as a whole, it was urged that an evaluation of the usefulness of IRS tax returns be made in connection with estimating tangible wealth in this sector. The Service could undertake a pilot study in this area to see whether it is feasible to collect information on tangible assets in sufficient detail.

In the services area, it was recommended that IRS data be used to the greatest extent possible for those entities in the nonprofit sector required to file as tax-exempt organizations. A master file on tax-exempt organizations has been set up. With the continuation of the present program of enforcement, and if the necessary coverage from those types of nonprofit organizations required to file tax returns is obtained, we could institute a statistics of income program in this area.

This would, of course, be a substantial undertaking. We are currently preparing a report for farmers' cooperatives for tax year 1963. For example, for exempt cooperatives, detailed balance sheet information is included. This could be done again for the census year. Another source of wealth data is a study currently in process which will present information on the wealth of individuals living in 1962 whose estates would have been subject to the Federal estate tax if they had died in that year. Detailed information on type of property is included.

In addition to our role in providing specific bodies of data for a national census of wealth, IRS records can serve two important overall purposes. One is as the source of universe mailing lists for industries not now covered by reporting programs of other agencies.

This would require coordination with other IRS offices. Second, the data from tax returns could provide benchmark or control totals in many areas for which the underlying detail is collected by another agency.

We are prepared to participate in providing the data for a national census of wealth. Since your office will be providing the leadership in such an undertaking, we will be happy to furnish any additional information you may need in helping you to decide what role you would like IRS to play in the overall effort.

D. SUGGESTIONS THAT MAY CALL FOR BASIC RESEARCH

1. *Industry classification*

A recommendation that discount department stores be shown as a separate category under retail trade presents a problem of industry classification that is similar to many that have been worked out with the help of the Budget Bureau over several past years. By consulting our documents, we can determine whether the term "discount store" is ambiguous and whether it would be impractical to draw the line as to whether or not a department store is in the discount business. Less easily solved is the problem of how to derive meaningful data for large corporations that have built themselves into entities that make a great deal of sense for management purposes, but which are difficult to classify by industry. As you know, we now use the standard enterprise classification which was developed as an approximate solution to this fundamental classification problem. Within this classification system, however, some modifications are made for practical purposes. In the report, criticism of IRS is made—both that the classifications are too detailed and do not make sense, and that they are not detailed enough. Perhaps it would be desirable to devote some high-power resources to researching whether or not there isn't another way, perhaps based on asset size, in which companies should be classified rather than on an industry basis.

DEPARTMENT OF AGRICULTURE

DEPARTMENT OF AGRICULTURE,
Washington, D.C., September 10, 1965.

DR. RAYMOND T. BOWMAN,
*Assistant Director for Statistical Standards,
Bureau of the Budget, Washington, D.C.*

DEAR DR. BOWMAN: As requested in your letter of August 12, 1965, we have reviewed the compendium entitled "Improved Statistics for Economic Growth" issued by the Joint Economic Committee. Attached are comments on the statements that refer to areas of statistics for which the Statistical Reporting Service or the Economic Research Service have responsibility.

A number of the statements in the report contain rather broad language that could be attached to more than one agency and more than one statistical program. We have attempted to determine the context in which the statements were presented and have limited our remarks to those for which the writers are either concerned with SRS and ERS programs, or with agricultural census programs in which these agencies have a major interest.

If you need further information or clarification on any of the comments, please call J. Richard Grant (code 111, extension 5159).

Sincerely yours,

NATHAN M. KOFFSKY,
Director, Agricultural Economics.

COMMENTS ON THE VIEWS AND SUGGESTIONS MADE TO THE JOINT
ECONOMIC COMMITTEE RELATING TO AREAS OF STATISTICS FOR WHICH
STATISTICAL REPORTING SERVICE AND ECONOMIC RESEARCH SERVICE
HAVE RESPONSIBILITY

Statement of Murray R. Benedict,¹ referring to—

(a) "the problem of maintaining an adequate flow of data on foreign trade."

(b) "* * * a number of difficult problems pertaining to the processing of the traditional types of foreign trade data; such as * * * the adjustment of reporting operations to perhaps illogical or at least inconvenient tariff classifications * * *"

The foreign trade statistics publication program of the U.S. Department of Agriculture is divided into two parts: (1) The agricultural exports and imports of the United States and (2) the agricultural exports and imports of foreign countries.

U.S. agricultural exports and imports, by commodities, are published monthly. Fiscal and calendar year series of such exports and imports are published, with (1) commodity, (2) commodity-by-country, and (3) country-by-commodity breakdowns.

U.S. agricultural exports, by six types of specified Government-financed programs (Public Law 480 and AID programs) and commercial sales for dollars (i.e., exports outside of the specified programs), by commodities, are reported quarterly, by fiscal year and by calendar year. Fiscal and calendar year series of such exports are also reported by country of destination. However, such exports are not reported on a country-by-commodity or a commodity-by-country arrangement. Data for the specified Government-financed programs originate in the USDA and in AID. Commodity totals and country totals are Census Bureau figures. Most operating agencies use accounting records to report exports under their program, while the Bureau of the Census reports the actual date of lifting. In addition, valuation procedures of operating agencies and the Bureau of the Census differ. The latter uses the market value for all exports while the operating agencies may use the actual CCC cost or still other valuation methods. Since commercial sales for dollars are the residuals of total exports, as reported by the Bureau of the Census, and shipments under specified Government-financed programs, the statistics now published are imperfect and a commodity-by-country or a country-by-commodity breakdown cannot be made. The USDA has recommended that the Bureau of the Census collect and report statistics on U.S. shipments under Government-financed programs on a country-by-commodity and a commodity-by-country basis. This would require the inclusion of additional information on export declarations. The collection and reporting of such information would meet a public need.

The commodity and country breakdown by which the USDA reports the foreign agricultural trade of the United States has proved adequate

¹ Improved Statistics for Economic Growth: A compendium of views and suggestions from individuals, organizations, and statistics users. Pp. 7 and 8.

for most purposes. Sometimes, however, more detailed import data than that published by the Bureau of the Census are called for. Beginning with September 1963, the Bureau of the Census published U.S. imports, classified according to the Tariff Schedules of the United States Annotated (TSUSA). When the TSUSA schedule proved too detailed for monthly reporting, the Bureau of the Census constructed a Schedule A, Revised. That schedule is made up of commodity items each of which consists of one or more TSUSA items and the classification system is based upon the Standard International Trade Classification, Revised (SITC). Schedule A, Revised has been the basis for the publication of U.S. imports by the Bureau of the Census since February 1964. That schedule has proved lacking in specificity. Thus a further revision of the import classification for publication by the Census Bureau may be required. Such a new classification should be introduced at the beginning of a calendar year in order to avoid the transition difficulties experienced in 1963. Moreover, a report showing 1 calendar year total for each import item in 1963 should be published without further delay, since the 1963 publication now available shows only January to August and September to December subtotals.

There is an urgent need to enlarge the statistical program of tabulating and reporting the agricultural trade data of foreign countries to include more complete and timely summaries of the trade of our principal competitors and customers classified by country, region, and trade bloc. The present limited program is based on data obtained from magnetic tapes purchased from the OECD and the U.N. Statistical Center. In the past, resources have not sufficed to obtain timely and detailed data on the foreign trade of other countries required to determine the U.S. position in major importing markets and vis-a-vis other principal suppliers. It is recommended that sufficient resources be provided to tabulate, analyze, and publish data on the exports and imports of the major world competitors and importers of agricultural products.

Statement by Arthur V. Edwards:² "Specific listings regarding the number of beef cattle farms, livestock operators, number of farms selling grain-fed cattle, number of beef cattle sold per year per farm, expenditures for fertilizers, expenditures for farm chemicals used, and the use of animal health products, by products, would be helpful."

Mr. Edwards recognizes that much of the information involves considerable detail and would require rather specialized statistical surveys. These informational needs must be evaluated in terms of other specialized and general statistical data requirements. The identification of beef cattle farms and livestock operators is dependent on the definitions established for a beef cattle farm and a livestock operator. Historically, data requiring restrictive definitions have been difficult to obtain through mailed inquiries. The number of beef cattle sold per year per farm would appear to be of limited value and present statistical problems, as the same animal may be sold through two or more hands during the year. Farms selling grain-fed cattle would also be dependent on the definition established for grain-fed cattle. At the present time, the Department does publish annually the number of cattle feeders for a majority of States. These data may at least partially satisfy the need for farms selling grain-fed cattle.

² Op. cit., p. 27.

Fertilizer and farm chemical data are available on quantities consumed annually but farm expenditure data for such items are not available. This is an area in need of added statistical data as the use of fertilizers and chemicals becomes increasingly significant on farm input data. At the present time, fertilizer expenditure data in much detail are limited to the census of agriculture conducted each 5 years and to selected expenditure surveys at irregular intervals. With the establishment of an annual enumerative survey by SRS, it would be feasible to obtain added fertilizer information for intercensal years if funds were available. Such information could relate to fertilizer and chemical expenditures.

Statement of David L. Ferguson:³ "That plea is to develop demographic information on a geographic basis more frequently than once every decade."

We support these views and recognize the need for demographic data on a more frequent interval than every 10 years. The current demands for geographic data are increasingly numerous and too varied to make a 10-year interval satisfactory. In view of the highly mobile nature of our population, up-to-date demographic data are needed for effective program planning and policymaking for small geographic areas. Whether it is necessary to replicate the decennial censuses at the mid-decade is debatable. It is possible that a national sample supplemented by local surveys when and where needed would suffice.

The Department's views on this subject are detailed in a legislative report dated April 29, 1965, on identical bills, H.R. 1966, H.R. 2187, H.R. 2857, H.R. 4423, H.R. 6093, and H.R. 6183. Copy supplied to Budget Bureau.

Statement by W. E. Hamilton:⁴ "Responsibility for agricultural statistics is divided between the Bureau of the Census of the Department of Commerce and the Department of Agriculture. In general, the two appear to have a good working relationship; however, the subcommittee might find it profitable to review the respective roles of these agencies in the production of agricultural statistics and the possibilities of achieving a more coordinated approach."

The present good working relationship expressed by Mr. Hamilton attests to the vigorous effort that these two agencies, with the coordination of the Office of Statistical Standards, have exerted over time to bring about a good relationship. This relationship strives to prevent duplication of effort and to support the activities of each other insofar as possible. Standards, definitions, procedures, etc., used relative to statistical data have generally been coordinated with the aim of uniformity. Admittedly, all efforts of coordination have not been completely successful due to specialized needs of each Department. It can be assumed that the coordinating efforts will continue and that improvements are possible and welcome.

Statement of W. E. Hamilton,⁵ to the effect that per capita income estimates of farm population are difficult to determine because non-resident operators are not considered a part of the farm population and their income is excluded from the estimates of the personal income of the farm population.

Historically, farm population and the population dependent on agriculture have been considered as more or less identical. Partly

³ Op. cit., p. 39.

⁴ Op. cit., p. 67.

⁵ Ibid.

because of this identity the early definitions of parity income were stated in terms of the per capita income of the farm population in relation to the per capita income of the nonfarm population.

The present series on per capita income of the farm population is a natural outgrowth of this identification. Over the years the validity of the identification of people living on farms and income from farming has decreased. People living on farms now receive large amounts of income from nonfarm sources and nonfarm people receive substantial amounts of income from farming.

A major advantage of the use of farm population in farm income work is that annual estimates are available. If the present per capita farm income estimates were abandoned there is no alternative that can readily be substituted. For example, there are no estimates of the population dependent on agriculture.

Statement of W. E. Hamilton:⁶ "It would be a major improvement if separate per capita income estimates could be prepared for operator families on commercial farms, operator families on noncommercial farms, and (hired) farm workers."

There are at present no estimates of population classified as would be necessary to implement this suggestion. Furthermore, it is doubtful that the development of such estimates would be given a very high priority.

Abandonment of the present series on per capita income of the farm population would mean the end of any per capita measure of income of the farm population. Alternatives would have to be series on income per farm, per family, or per worker rather than per capita.

A large part of the objective expressed here is met by the new estimates of income of farm operator families by value of sales classes. Data for these new series for the years 1959-64 were published in the Farm Income Situation, July 1965. The data include estimates of average income per operator family from farm and off-farm sources for major value of sales classes. They provide a basis for examining the income position of commercial and other farms separately.

Statement of W. E. Hamilton,⁷ recommending that USDA estimate per hour earnings so that they will give an adequate estimate on how farm operators are doing in comparison with factory workers.

Since the series on estimated hourly returns to all farm labor and management was developed, additional information has become available that would probably make it possible to divide the total man-hours used in agriculture production into hired and nonhired. This would permit calculation of an estimated hourly return for the labor and management supplied by farm operators and members of their families. We expect to give serious attention to this question in the next several months.

Statement of W. E. Hamilton,⁸ recommending a single criterion in defining a farm for census, rather than present dual criteria.

The dual criteria used in definition of a farm in the 1959 Census of Agriculture were adopted again in 1964 to provide comparability for two censuses. We agree that the basis for farm definition should be thoroughly reviewed prior to the 1969 census. The continuing con-

⁶ *Ibid.*

⁷ *Op. cit.*, p. 68.

⁸ *Ibid.*

centration of farm production on larger units underscores the need for review.

Statement of W. E. Hamilton,⁹ recommending improved classification of farms; present terms of "commercial" and "noncommercial" are arbitrary and misleading.

This issue is largely one of semantics. Perhaps terms like "low production farms" would be more meaningful. The present scheme of economic classification of farms is useful for economic analysis; an adequate number of income class intervals should be provided for this purpose.

Alternative bases of economic classification have been proposed and are under discussion. This year's meeting of the American Farm Economics Association devoted a session to the subject. Special analyses of the 1964 census data are planned and results will be given careful consideration in planning for the 1969 census.

Statement of George Katona,¹⁰ recommending expanded survey research on travel, vacation, recreation, the purchase of hobby and sports equipment, as well as on cultural activities.

We concur that in view of the increasing alternatives for use of leisure time it is important that better expenditure data be devised for activities associated with cultural pursuits. These expenditure data will provide a better understanding of how people want to use leisure time and will furnish valuable guides to future investments for recreation, travel, and leisure-time facilities.

Statement of Lester S. Kellogg:¹¹ "The index of prices paid by farmers for cost-of-living items has probably outlived its usefulness and could be supplanted by regional consumer price indexes."

It is not clear why Mr. Kellogg downgraded the measure of prices paid by farmers for items used in family living. In the preceding paragraph, he recognized—somewhat obliquely—the value of the Consumer Price Index, which relates primarily to prices paid by urban consumers. In our view, farmers are a sufficiently important segment of the economic and social fabric to merit the measurement of prices they pay for goods and services for family living. This index is, of course, one of the components of the Parity Index, which is used to compute the parity prices of farm products. Parity prices in turn are an important element in the structure of agricultural price support. Without entering into a discussion of the merits of the present price support legislation, it seems clear that unless or until a change is made in the basic legislation defining the price support program, the statistical mechanism prescribed as part of that structure should be maintained as dependable and accurate as possible.

With respect to the sentence on page 86 "A parity index, for instance based on 1910-14 is anachronistic," few students of agriculture would deny that 1910-14 is long out of date as a basis for directing agricultural policy. Inasmuch as the base period is prescribed by legislation, any change lies with the Congress rather than with the executive branch. The Secretary of Agriculture as long ago as 1957 recognized this, and in a report, "Possible Methods of Improving Parity," published as Senate Document No. 18, 81st Congress, recommended that the parity base be shifted from January 1910-December 1914 inclusive,

⁹ *Ibid.*

¹⁰ *Op. cit.*, p. 82.

¹¹ *Op. cit.*, pp. 85-86.

to January 1947–December 1956 inclusive (p. 5). Appropriate language for shifting the base was presented immediately following that recommendation. Doubtless this recommendation would need to be reviewed in the light of present circumstances. However, this or any equivalent change in the parity base would not undermine the structure of the parity legislation, but would merely provide for updating the statistical mechanism relating thereto. It would not destroy the Parity Index as would Mr. Kellogg's suggestion.

Statement of Gordon W. McKinley:¹² "In point of urgency, I believe the most seriously needed improvement in Federal statistical programs is more adequate data on who are the 'poor' in our society."

We agree that with the interest in the reduction of poverty in our society there is a great need to identify the "poverty" sector of the population and to broaden and improve the data that are available. There is a need for more knowledge about income distributions of families, persons, and the relationship between levels of income and economically relevant personal characteristics. Such knowledge combined with population and occupational data by geographic divisions would be useful to identify poverty situations; and classify them into groups that are meaningful for policy program formulation.

Statement of Oscar Morgenstern¹³ to the effect that: There is considerable duplication among Federal agencies on the publishing of data on labor statistics. The USDA work to which reference is made has now been transferred to the Statistical Reporting Service.

Professor Morgenstern's comments tend generally to oversimplify a fairly complex situation. Statistics concerning employment originate in several places, and whether the situation will be improved by eliminating all duplication is too complex for resolution by brief comment. It may be noted, however, that the matter of employment and unemployment statistics was studied with great care by the President's Committee to Appraise Employment and Unemployment Statistics, which made its report in September 1962 under the title "Measuring Employment and Unemployment." The executive departments reported to the Joint Economic Committee concerning those recommendations in a hearing in June of 1963.

With specific reference to the work of the Statistical Reporting Service (referred to by Professor Morgenstern under the Agricultural Marketing Service) the data on farm employment and wage rates published by the Statistical Reporting Service are the only data available anywhere, or published by any agency, on the State basis. The summation to the national level does duplicate in a sense the data published by the Bureau of Labor Statistics, but since the Bureau of Labor Statistics does not publish data by States, the duplication is trivial. Moreover, as described in the report of the President's Committee, there are certain differences between the data published by the Statistical Reporting Service and those published by the Bureau of Labor Statistics, which tends further to minimize the real duplication involved.

As is the case with many other types of statistical data, national totals are more limited in their usefulness than are data on a State and local basis, which aggregate to a national total. Many problems in-

¹² *Op. cit.*, p. 92.

¹³ *Op. cit.*, p. 96.

volving use of data on employment require more detailed and localized information than is provided by national totals alone.

The President's Committee recommended certain improvements in the data published by the Statistical Reporting Service, and the Service is developing proposals which, if implemented by appropriations, will in large measure meet the recommendations of the President's Committee.

Statement of Fred O. Toof:¹⁴ "Inputs are one of the weakest areas of knowledge: what, how much, and by whom among farmers and ranchers? * * * If the national policy is to encourage the family farm, we need wider, deeper, more frequent probes to support this policy or even to change it, should this be indicated."

Better data on farm inputs are especially needed, as is information on the economic and contractual relationships between farmers and the nonfarm industries and businesses which serve them.

We also agree with Mr. Toof's statement regarding need for additional analyses of the economic position of the family farm in U.S. agriculture. Such analyses are needed as a basis for formulating policies and programs regarding family farms.

Statement by Fred O. Toof:¹⁵ "As we understand it, there is presently under somewhat favorable consideration an annual sample survey of agriculture. This, as now conceived and to be added to later, offers an opportunity for much accelerated gathering of needed information. We should like very much to give our support to this plan."

Although the comment is interpreted to apply to the Bureau of the Census, it can be pointed out that nearly all of the statistical data currently published by the Department of Agriculture is based on a sample of the total universe. Historically, the sample data collected have represented the voluntary response to mailed inquiries. Efforts of the Department over the past several years have been directed toward the development of a probability area sample capable of obtaining a wide variety of statistical data with known degrees of error. This sample is nearing realization with all States to be on an operating basis during fiscal year 1966. It will provide an excellent vehicle to obtain a wide variety of data through the enumeration of a well-designed sample of farmers. These facilities for probability area sampling were used during the last fiscal year to provide the Economic Research Service with data from a national sample survey relating to pesticide uses by farmers, and with data from a sample of cotton-growers to obtain production costs. It is expected that similar special enumerative surveys to obtain economic data will be undertaken as needs arise and as funds are provided.

Statement of Tom Winemiller:¹⁶ "Many of these revolutions of agriculture are not adequately defined by our present statistics * * *. Large areas of 'unknowns' still exist * * *. We certainly know too little about the multibillion-dollar businesses that supply efficiency to farmers in the form of technical products and services. Perhaps part of the problem is in the difficult area of defining whether securing such data properly belongs under the banner of the Department of Agriculture or the Department of Commerce."

¹⁴ Op. cit., p. 134.

¹⁵ *Ibid.*

¹⁶ Op. cit., p. 140.

We agree with the need for more adequate data on farm inputs and agriculture-business relationships. This recommendation is closely related to Mr. Toof's recommendation, and to the suggestion of Mr. Glidden.¹⁷

Securing data of this kind would involve surveys of "nonfarm" industries and businesses that serve farmers to varying degrees. Logically, the Department of Commerce should have primary responsibility for conducting general purpose or national surveys of "business" operations. However, because of the great importance of the data to agriculture, the USDA should share joint responsibility with Commerce in planning the surveys and tabulation of data. For specific research studies dealing with a segment of the industry or a limited geographic area, the agency conducting the research should continue to have primary responsibility for necessary data collection.

¹⁷ Op. cit., p. 51.

OFFICE OF BUSINESS ECONOMICS

U.S. DEPARTMENT OF COMMERCE,
OFFICE OF BUSINESS ECONOMICS,
Washington, D.C., September 14, 1965.

Mr. RAYMOND T. BOWMAN,
*Assistant Director for Statistical Standards, Bureau of the Budget,
Executive Office Building, Washington, D.C.*

DEAR RAY: As requested in your letter of August 6, 1945, to George Jaszi, the attached document gives our comments on the views expressed in the Joint Economic Committee report, "Improved Statistics for Economic Growth."

Our comments deal with the views contained in the report which relate to OBE data. We have not attempted to evaluate the comments about the statistics of other agencies; nor have we incorporated a systematic discussion of our needs for improved or extended primary data.

Sincerely yours,

MORRIS R. GOLDMAN, *Acting Director.*

COMMENTS OF THE OFFICE OF BUSINESS ECONOMICS ON "IMPROVED
STATISTICS FOR ECONOMIC GROWTH"—A REPORT OF THE JOINT
ECONOMIC COMMITTEE, CONGRESS OF THE UNITED STATES

1. THE NATIONAL INCOME AND PRODUCT ACCOUNTS

Timing

There were comments suggesting earlier publication of the corporate profits estimates and of the accounts in general.

Within the past 2 years we have made significant progress. We now publish several tables of the national accounts in the middle of the month following the quarter of coverage—e.g., first quarter data in mid-April.

The timing of profits estimates has also been advanced. A second quarter 1965 estimate, for example, was published in mid-August. In September, we shall make another estimate of the second quarter profits and publish additional detail—profits by major industry. (Fourth-quarter data are delayed by a month because of the end-of-year closing problems.) There is no immediate prospect for further advance of this schedule. Internal studies suggest an excessive risk of significant error by further speed up.

Flow of funds

A number of participants suggested integration of the two systems or publication of a reconciliation table.

With the changes in definitions we introduced in the 1965 revision of the national income and product accounts and changes made by the Federal Reserve Board over the years and to be made when they incorporate our new data, considerable progress toward integration has been made.

Wealth estimates, balance sheets, and extension of national accounts

There were several comments calling for extension to a full set of integrated national accounts.

We feel that real progress in this direction has been made in recent years. We have input-output accounts integrated with the national income and product accounts. As noted above, progress is being made toward integration of the flow-of-funds accounts. Work has begun at OBE and Census on planning a program of wealth estimates with this Office designated as the "focal agency" for estimation and Census as the "focal agency" for data collection. A budget request for financial support will be included in our forthcoming submission. We hope that funds and, perhaps more important, the needed technical staff will be forthcoming. The ultimate goal would be balance sheets fitting into a fully integrated system.

Government capital formation

We place a high priority on this extension of our estimates but there are numerous, difficult problems—both definitional and statistical. Such estimates would be needed in any case as building blocks for wealth estimates.

Size of revisions and reliability

Concerning these comments we note that there were also requests for "more and earlier." Large revisions are regrettable and improvements in primary data sources and improved methodology are continually sought. However, there is always a risk in publishing estimates early from preliminary primary figures or inferior source data. The real issue is whether such early estimates adequately serve the needs of users and policymakers with an acceptable risk in their reliability.

Obviously related is the Morgenstern question of reliability. It would not be possible to place a plus-minus range to the level of a number. Nor would we recommend a plus-minus range on the change. Our work isn't susceptible to such measurement when the great number of data sources of varying quality are considered. We are interested in the possibility of providing users with an evaluation of the quality of the data and plan to pursue this problem shortly. An example of the type of analysis that has been done is the study of "successive revisions" published as a Commerce working paper entitled "The Quarterly National Income and Product Accounts of the United States, 1942-61," by George Jaszi.

Revisions in the inventory investment component have been a matter of concern for some time. Our data sources seem to consistently yield a low estimate from their preliminary releases compared with their eventual results. We plan to study this subject in depth as soon as possible.

Profits, depreciation

The comment about revisions in depreciation regulations is well taken. The data used in the Murray Brown article (Survey of Current Business, October 1963) on alternate measures of depreciation and profits will be recomputed with the new benchmark data and updated. We should keep these estimates on a relatively current basis (perhaps in the July issues of the Survey) so that users can have optional estimates of depreciation. We should also, at some point in the future, consider the possibility of using a revised definition of depreciation in the official accounts.

The "discrepancy"

Burns calls attention to the fact that we actually make two estimates of GNP—the expenditures side and the income side—and that they are "significantly different * * * with regard to short-term changes."

It should be recognized that some differences in these two estimates of GNP are unavoidable considering the hundreds of data sources involved in construction of our estimates, the timing differences between actual production and the recording of the production in accounting records, the problems of seasonal adjustment, and the varying irregulars in the many series used. The movements of the estimates of GNP are very close and we do not agree that the differences are significant.

Miscellaneous items

- (a) GNP estimates by month do not seem feasible at this time.
- (b) At this time we cannot consider making quarterly anticipatory estimates for the Government sector.

2. INTERINDUSTRY FLOWS (INPUT-OUTPUT)

First, it is important to correct a mistaken impression that may emerge as a result of the testimony of Miss Justine Rodriguez, of the Chase Manhattan Bank. Her statement leaves the impression that the 1958 input-output table rests on an extremely weak statistical foundation and that little is being done to improve this situation. This is far from the case. Much of the information reflected in the 1958 table comes from actual establishment reports on materials consumed. Moreover, there is a continuing record of OBE-Census cooperation to expand and coordinate this type of data collection. The very successful supplementary survey of selected materials consumed in the chemical, machinery, and equipment industries ("Selected Materials Consumed," 1958 Census of Manufactures, MC58(1)-7 Supplement) and the considerably expanded questionnaires on materials consumption in the 1963 Census of Manufactures are examples of the continuing efforts of OBE and Census to improve the statistical foundation of input-output tables.

We agree with Professor Morgenstern's view that it is important to have regular input-output tables which serve as useful tools in economic policy decisions. We also agree with his statement that it would be desirable to achieve international comparability in input-output tables. Professor Morgenstern carefully points out the considerable obstacles to international comparability of existing input-output tables. It should also be pointed out that considerable progress has been made toward international comparability of future input-output tables.

In May 1964, the United States, along with 20 other countries, participated in the Working Group on Input-Output Statistics of the Conference of European Statisticians. One of the express purposes of this meeting was to explore the possibilities of international standardization of national input-output tables. Considerable agreement was reached on recommendations for standardized national input-output tables and a tentative classification scheme for such tables (based on ISIC) was developed.

Morgenstern refers to the U.S. table for 1958 as being "a rather high number of classifications" which is quite surprising since the table is most often criticized as having too few classifications. (See Gould, p. 55.)

3. REGIONAL STATISTICS

Nearly half of the comments which made specific recommendations regarding data collection suggested an expansion of the program of regional statistics. There were requests for county or metropolitan data on income, employment, population, and prices; for greater coordination and leadership of local efforts by the Federal Government; and for statistics that were comparable conceptually and statistically from area to area.

The current program of the OBE in the field of regional statistics, when fully implemented, will go a long way toward meeting the expressed requests for regional statistics. For example, our program calls for (1) the measurement of income in local areas by industrial source for selected years, and of income in standard metropolitan statistical areas, annually; (2) for the analysis of factors underlying

changes in economic activity by counties, and analysis of geographic differences in rates of income growth and in levels of per capita income; and (3) for the development of a set of regional economic accounts that will be analytically useful and capable of being implemented statistically.

4. CAPITAL EXPENDITURES FOR PLANT AND EQUIPMENT

This survey is collected jointly with the SEC and reporting is on a company basis. There is little prospect of getting large firms making capital investments all over the country to report both their actual and their anticipated expenditures by geographic divisions.

We have made progress in recent years along the lines suggested by Burns. In addition to total expenditures we now publish quarterly estimates for manufacturing and public utilities of the value of expenditures during the quarter on projects started that period. In addition, estimates of carryover are published. This is the value of expenditures yet to be incurred on projects already started.

NATIONAL CENTER FOR HEALTH STATISTICS

DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE,
PUBLIC HEALTH SERVICE,
Washington, D.C., August 26, 1965.

Dr. RAYMOND T. BOWMAN,
*Assistant Director for Statistical Standards,
Bureau of the Budget, Washington, D.C.*

DEAR DR. BOWMAN: This is written in response to your letter of August 6 to Dr. Forrest E. Linder, inviting comments on the Joint Committee Report on Improved Statistics for Economic Growth, printed in July 1965. Forrest Linder, Ted Woolsey, and several other senior members of the staff of the National Center are, for a variety of reasons, not in Washington and will not be for some time. Therefore, our comments may have a narrower base than we would prefer. It is possible that the Center may wish to extend remarks contained in this letter, although we recognize your timetable is very tight and it may not be feasible to bring to your attention any additional remarks in time to be useful.

There is enclosed a copy of a letter dated March 23, 1965, from me to Senator Proxmire, which was a reply to a request for views and comments on the present and future needs for the Government's economic statistical program. The letter to Senator Proxmire was treated in our organization as a personal reply although, of course, the reply was discussed with others. This letter represents our views on some of the more important elements on which it may be appropriate for us to express opinions:

Turning to the committee report, which contains statements from only nongovernmental persons, the following comments are offered:

1. The report deals, of course, with economic statistics and contains statements almost exclusively from persons who would be classified in the first instance as economists. The National Center for Health Statistics is not primarily an economics statistical agency, although we are interested in a wide range of matters which have some bearing on economic affairs of the country. Under these circumstances one would not expect many of the economists' statements to the committee to contain material bearing directly on the principal interests of the National Center, and this is indeed true, one finds upon reading the committee report. Contrastingly, there is perhaps a surprising number of references to matters in which we do have special concern. Some of these are noted below.

2. One of the most common recommendations found in the report relates to the need for data for smaller geographic areas. We too have felt this pressure and comment on it was made in my letter to Senator Proxmire.

3. It seems to me that even though this report is pointed toward economic statistics there is less emphasis placed on the matter of striking population growth, both in the United States and in foreign lands, than I would have expected to see. We feel, and indeed I thought it was rather common knowledge, that the extent and details of popula-

tion growth both here and abroad were of fundamental and increasing importance to the course of economic affairs. I do not mean to imply that this is an oversight in the present Federal statistical program, or that the matter was overlooked entirely by the people who submitted statements, but rather it seems to be underemphasized. Special mention was made of this matter, among others, by Ansley Coale, Jack C. Griffin, Abraham Jaffe, Frank Notestein, Morris Hamburg, and John Norton. Several people, including Coale and Notestein, make reference to the inadequate marriage and divorce data in the country and stress the importance of information on family formation and dissolution. This point, too, was one made in my remarks of March 23, and is one which our Center feels is an important area of needed development.

4. One of the healthiest features of the comments of people to the joint committee is the frequency with which they stress the desirability of assuring that Federal data are of high quality. So often when consumers are asked for opinions on data, those opinions are expressed in terms of "give us more and more and more;" and of course there is much of this element in the joint committee report. But frequently, too, the contributors to that report are in agreement with my view that great stress needs be placed today and is in fact being placed by the more responsible Federal statistical agencies on the development and evaluation of quality of statistical data, as distinct from collecting and publishing more figures.

5. Several respondents to the committee stressed the desirability of increased use of Federal-State cooperative arrangements. The Federal Government already utilizes this practice in a variety of fashions. It is desirable that Federal and State activities be coordinated and it may be essential to the securing of adequate local small area data that Federal-State and even local agencies work together. This does not mean, necessarily, that any two or three agencies are equal partners in each phase of the undertaking. It is more likely that the Federal Government, the State government and perhaps the local government each will make a differing contribution to the end product.

6. It is clear from the comments to the joint committee that the electronic computer has become a part of the statistical picture. It is near certainty that the role of the computer will increase. One must always remember, however, that the computer will not operate alone and cannot do the job itself. We advance most efficiently when we think of the statistician and the analysts and the computer working jointly as an integrated mechanism for the production of information.

7. I liked the view expressed by Ralph Watkins that while it is important in the production of statistics that we be not wasteful, it is of equal importance that we accept responsibility to put sufficient energy into the development and maintenance of a system of essential economic intelligence. And that we must recognize that, though expensive, the intelligence system is an absolute necessity for a prospering economy.

8. At least one respondent to the committee said that statistical agencies should do more to sell their information; that is, to make known the availability of their data. It is difficult for a statistical agency to assess this point. But it is clear that we do collect, process,

and perhaps warehouse much information that could be used to advantage by the American business community, and even to governmental economic planners, if it were known that the relevant data exist.

Thank you for the opportunity to comment on this matter. We are always glad to have a chance to express views on the course which statistical programs should take and, in turn, welcome comments and criticisms of our own activities.

Sincerely yours,

WALT R. SIMMONS,
Chief Statistical Adviser.

DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE,
PUBLIC HEALTH SERVICE,
Washington, D.C., March 23, 1965.

HON. WILLIAM PROXMIRE,
U.S. Senate, Washington, D.C.

DEAR SENATOR PROXMIRE: I welcome the opportunity to respond to your invitation of March 2 for comment on present Federal statistical programs and modifications or improvement needed for economic purposes.

A considerable part of my professional experience has been in fields formally classified as economic statistics. But for the past 7 years my work has been mainly in statistics of population, vital events, and health. For that reason my remarks are restricted mostly to these latter topics and their impact on economic affairs. Comments have been restricted further to six major areas treated in the attached statement, although numerous desirable modifications of current statistical programs could be listed.

The views expressed in the attached statement are personal, rather than official positions of the Public Health Service or the Department. Within that context I ask no restriction on their use by the committee.

Thank you for this opportunity to participate in your review of statistical programs.

Sincerely yours,

WALT R. SIMMONS,
Chief Statistical Adviser.

STATEMENT OF WALT R. SIMMONS, CHIEF STATISTICAL ADVISER,
NATIONAL CENTER FOR HEALTH STATISTICS

VIEWS ON FEDERAL STATISTICS AND MODIFICATIONS NEEDED FOR
ECONOMIC PURPOSES

1. The importance of viable and flexible data collection systems

Maintenance of a flexible system of data collection is a keystone of the structure of statistical information. This system is the family of records, censuses, registers, and surveys that provide the mechanisms through which needed information can be secured. The mechanisms or tools must be the best which the state of the arts permits, must be always in a state of readiness, and must be adaptable to changing requirements. The collection processes themselves and procedural improvements in them are more critical to economic analysis than is any single statistic.

Collectively, these implements should be prepared to tap any legitimate source of information as needed. For example, in the field of vital and health statistics, present organized data collection machinery includes a nationally coordinated but State-administered registration of births and deaths; a household interview survey; a physical examination technique for samples of the population; and a variety of procedures for sample surveys of records in hospitals and other places that provide personal or medical care. Each of these devices is suitable to a particular class of needs. It is of first importance that Federal data collection capability—which cannot be developed on short notice—be maintained at a level of the highest quality, and reflect an unchallenged policy of presentation of data without partiality toward any viewpoint. Continuing surveillance of collection methods is a must, while the search for new or improved procedures also is never finished. In the health field, new record sources, such as more intensive exploitation of hospital records; and sample panels of physicians, offer promising possibilities for extending our knowledge.

2. Development and evaluation of quality

In the past three decades statistical surveys have changed from haphazard tabulations to scientific operations. Much of this change derives from probability sampling. Often, because sampling requires a much smaller staff than attempted complete enumerations, that staff can be better trained, and resulting statistics have a higher quality. It is notable, too, that sampling reduces the paper load on the total respondent public.

While it is of course administrative and regulatory demands rather than purely statistical requests that contribute mostly to respondents' reporting burden, there are probably still areas in which sampling for a part of needed information is desirable even in regulatory affairs—for example, in matters of accounting and auditing. The technical front of statistical methodology today, whether of sample

surveys or attempted complete enumerations, is evaluation of the counting or measurement process itself. Very substantial effort is needed to determine the quality of statistical data, to discover, measure, and minimize components of error. Several agencies in the Federal Government have made notable contributions in this field, but only a beginning has been made.

Methodological research is an essential because no satisfactory method is known for solving some of the most significant problems in evaluation of quality of data. Yet it is quite likely better to have one or two sound statistical measures on a topic than to have a dozen sloppy, ill-defined statistics of unknown significance. It may be that the Federal Government should offer more technical aid to respondents and to cooperating State agencies in the interest of better quality data.

3. Health, disability, and the labor force

In his 1965 Economic Report the President said he believes "Congress will find economic as well as human reasons to support my proposals on education and health." This is a reflection of the widely recognized fact that the health of its citizens is one of a nation's greatest assets. To large degree, wise actions toward improvement of health must be based on statistical knowledge of health status of the population. Providing such knowledge is a principal function of the National Center for Health Statistics. Several other organizations contribute to the picture also. It is suggested, however, that data on health of the population, and on utilization of hospital and medical facilities, can appropriately be given more specific and intimate attention in analysis of economic situations. In particular, the health and disability experience of persons in the labor force or potentially a part of the labor force deserves greater attention. Sharper discrimination is needed among persons unable to work, disabled persons, the unemployed, and perhaps other categories of persons who are unemployable at desired skills.

4. Analysis of population change

It is increasingly common for responsible students of socioeconomic affairs to declare that the world's most significant unresolved problem is the growth of human populations. Indeed, this is a most pervasive matter. The catalog of its impact is without end. To feel the magnitude of the subject, one needs only recall such elements as requirements for education, housing, furniture and equipment, transportation, medical and dental care, and facilities for older citizens. The size and composition of populations is critical to analysis of both domestic and foreign commerce, and to both national and international political affairs. Statistical evidence on populations and population change is extensive, but not sufficiently so, and perhaps not adequately analyzed. Much additional work is desirable in securing currently greater detail on such subjects as births, deaths, marriages, divorces, education, occupations, and migration; and in developing improved methods for projecting population trends. Family formation, household size, and work capability obviously should be reflected by statistics in these areas. It might be noted that even minimum information on marriages is available in only 36 States; on divorces for only 22 States; and on persons classified adequately by occupation scarcely at all. For many

professional and semiprofessional occupations no fully satisfactory count has ever been made. Finally, on this topic, it is emphasized again that the United States has not only domestic problems to solve, but can profit from helping other nations to solve their problems in measuring population change—especially in developing nations.

5. Statistics for small areas

Comment on this subject is purposely nonspecific. It has been and is typical that many consumers want and need statistics for areas smaller than the United States; for regions, States, metropolitan areas, counties, cities, and even for sections of the city. Usually such statistics can be secured only at considerable cost, while much of the expenditure would be wasted if blanket provisions were established to provide small-area data. Several types of decision are required. Which topics must be tabulated for very small areas? Which by State? For what subjects is a census the best choice? How frequently must data for small areas be collected? To what extent is it necessary that data collected for small areas be assembled by a process which makes them comparable with other areas and with national estimates? Are there subjects for which adequate, although imprecise estimates for small areas can be built synthetically from rate data compiled from coverage of component classes of population over larger geographic areas? It is suggested that a new review of the matter be undertaken—perhaps a task force to consider content, methods, and costs.

6. Food consumption

Patterns of food consumption affect health, agriculture, industry, and commerce. They have impact on dental conditions, and death rates. They may be reflected in some of the consequences of air and water pollution, or the intake of radioactive materials. They are significant in the building of consumer price indexes, and possibly in cost-of-living indicators. Intermittent and experimental measurement of food consumption has occurred. Satisfactory measurement is difficult, and especially if one requires distribution of persons by amount consumed of specific commodities or products. Different users of the data will emphasize different aspects. It is suggested that further pilot studies be undertaken to determine best methodologies and to discover whether answers satisfactory to users can be obtained.

OFFICE OF EDUCATION

DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE,
OFFICE OF EDUCATION,
Washington, D.C., August 13, 1965.

Mr. RAYMOND T. BOWMAN,
*Assistant Director for Statistical Standards, Executive Office of the
President, Bureau of the Budget, Washington, D.C.*

DEAR MR. BOWMAN: This responds to your request for comments on "Improved Statistics for Economic Growth," compiled by the Joint Economic Committee.

As users, we join with many of the contributors to the volume in wanting more current small area data than the 1960 census provides. Our particular need is for county data on children of low-income families, or some related figure to update the 1960 figures.

By and large, we do not produce a great deal of economic data in the areas of concern to the contributors. A few special topics may be mentioned.

1. Improvement of construction statistics was mentioned again and again by the contributors. The Office of Education produces data on construction completed in higher education, and to some extent in public elementary and secondary education.

2. With regard to the money market, we produce timely data on bond sales for educational construction.

3. Responding to the renewed interest in wealth statistics, we are asking about book value of plants in a new survey of nonpublic elementary and secondary schools.

4. Data from our surveys on staff and expenditures in education are used in the national account estimates.

Sincerely yours,

A. M. Mood,
Assistant Commissioner for Educational Statistics.

COUNCIL OF ECONOMIC ADVISERS

EXECUTIVE OFFICE OF THE PRESIDENT,
COUNCIL OF ECONOMIC ADVISERS,
Washington, November 2, 1965.

MR. RAYMOND T. BOWMAN,
*Assistant Director for Statistical Standards,
Bureau of the Budget, Washington, D.C.*

DEAR MR. BOWMAN: You have requested the comments of the Council on "Improved Statistics for Economic Growth," the report of the Joint Economic Committee's Subcommittee on Economic Statistics, of which Senator Proxmire is chairman.

The subcommittee is to be congratulated for its extremely useful and thought-provoking compendium of statements from statistics users. As Senator Proxmire said in his letter of transmittal: "The impressive advances of economic policy in recent years have been largely the consequence of greatly improved economic statistical information." The subcommittee's work helps to point the way for further improvement in the Federal statistics program. Hence, we are happy to have this opportunity to comment on the subcommittee's compendium. Our comments are not exhaustive; they do try to identify areas of possible improvement in the Government's statistical program that strike us as of particularly high priority in their possible assistance for formulation of Government policy.

In the opinion of the Council of Economic Advisers, the following list of improvements or additions to the Government's statistical program deserve serious consideration:

1. *Balance-of-payments statistics.*—In view of the importance of policies concerned with the U.S. balance of payments, it is essential that policymakers have available to them full, accurate, reliable, and prompt statistics on the balance of payments. Consequently, we would like to underscore suggestions contained in the compendium for improvement in the timeliness and accuracy of the U.S. balance-of-payments statistics. Furthermore, in view of the necessity for increasing public understanding of the meaning of these statistics, we are also in full agreement with the request for more complete presentation of the definitions of the various balance-of-payments components and the various ways of drawing balances.

2. *International price comparisons.*—Since the competitiveness of the U.S. economy in world markets is one of the most important aspects of our balance of payments, it would be extremely useful to policymakers to have readily available more accurate statistics representing international price comparisons, particularly comparisons of export prices.

3. *Fringe benefits.*—In order to obtain an accurate picture of movements in total labor compensation, it is necessary to have statistics not only on wage and salary payments but also on fringe benefits. If the Government is effectively to define and encourage adher-

ence to guideposts for noninflationary wage and price behavior, it is necessary that current statistics on labor compensation be accurate and comprehensive.

4. *Productivity*.—More accurate estimates of the rate of growth in output per man-hour in the total economy and in its major sectors would contribute importantly to economic analysis and policy formation. Such information is a vital ingredient in estimating the general guide for wage increases in the private economy and also for estimation of the potential output of the economy at full employment.

5. *Industrial capacity*.—More accurate and comprehensive statistics on the volume of industrial capacity, the rate of growth of capacity and its relationship to investment spending, and the rate of capacity utilization would be extremely useful in making estimates of the potential full employment output, in forecasting the rate of growth of our supply capacity, in identifying the factors which influence it, and in estimating the sustainable rate of investment at full employment. We recognize that serious work is being done on this subject and that the problems encountered are extremely difficult. We wish only to indicate our agreement with those statements contained in the compendium that emphasize the importance of this area of statistical research.

6. *Job vacancies*.—Accurate information on job vacancies, properly categorized by type and location, could contribute to a more accurate picture of the current rate of labor utilization in the economy and could also assist in the operation of various manpower policies aimed at the most effective matching of job seekers and job opportunities.

7. *Inventories*.—We agree with those statements that emphasized the need for improving the accuracy and timeliness of inventory statistics. The rate of inventory accumulation is a major contributor to fluctuations in economic activity, and must be diagnosed in the formulation of effective stabilization policies.

8. *Housing activity and mortgage financing*.—Statistics on housing activity are hampered by the lack of appropriate recent benchmark data relating both to homebuilding and to the size and composition of the housing stock. Furthermore, analysis in the housing and housing credit field is hampered by the lack of comparability among statistics on homebuilding activity, vacancy rates, mortgage financing, and mortgage delinquencies and foreclosures. In view of the extensive housing credit programs of the Federal Government, it seems appropriate that steps should be taken to improve the statistics in this field.

9. *Credit*.—We are in full agreement with the suggestions in several of the statements in the compendium that our knowledge of credit developments would be greatly improved by the increased availability of information on the terms on which credit of various types is made available.

10. *Consumer prices*.—Although current estimates of consumer prices are now extensive in coverage and become available quite promptly, there is still room for improvement in various technical aspects of the Consumer Price Index. In particular, techniques of adjustment to reflect quality changes and new goods deserve a full and prompt review. Since maintenance of price stability is a high-priority policy objective, it is extremely important that we have the best possible measure of actual price developments.

11. *Income distribution.*—In view of the increasing concern with poverty and the expansion of programs focused on its elimination, it becomes quite important to have appropriate statistics measuring the size distribution of income. Work is being done toward the objective of reinstating a statistical series on the size distribution of personal income corresponding to the personal income series in national income and product accounts. We believe that this work deserves support and encouragement.

12. *Savings, assets, and liabilities.*—We noted with interest comments by several of the respondents to the subcommittee concerning the lack of coordination among various statistical estimates of savings. We are fully sympathetic with the long-term objective of improving the statistical estimates of saving and investment flows and coordinating them in a consistent flow-of-funds format. We believe that the Federal Reserve is making important progress in this difficult area and that work on this subject should be encouraged. It is also to be hoped that this work would also lead to estimates of balance sheets for the major sectors of the economy, including both financial assets and liabilities and real physical assets. This must, of course, be a long-run project coordinating various specific statistical programs to estimate various components for such a balance sheet. We would attach particular importance to estimates of the capital stock that could be related to industrial capacity.

13. *Coordination of statistical programs.*—As many of the respondents to the subcommittee noted in their statements, there is a continuing need for coordinating the various statistical programs and releases. We would strongly support efforts in this direction, including the development of and adherence to standard definitions and classifications and the coding and storing of data in a manner that facilitates the combined use of a range of statistical series in projects requiring their comparability.

Sincerely,

ARTHUR M. OKUN, *Member.*

FEDERAL RESERVE SYSTEM

BOARD OF GOVERNORS,
FEDERAL RESERVE SYSTEM,
Washington, D.C., October 20, 1965.

MR. RAYMOND T. BOWMAN,
*Assistant Director for Statistical Standards,
Bureau of the Budget, Washington, D.C.*

DEAR RAY: In response to your request of August 6, we have reviewed the compendium entitled "Improved Statistics for Economic Growth," taking particular note of suggestions bearing directly on the work of the Board of Governors. I'm sorry to have been so late in returning our comments, but the scope of the report was wide and touched on many areas of our work. Our preliminary views were transmitted to Milt Moss earlier.

In general we are encouraged by the widespread recognition of the importance of high quality information as an aid to analysis and policy formation and by the interest shown in many different links of the "long chain of collection, tabulation, and interpretation" referred to in one of the letters.

Several comments were made concerning the flow-of-funds accounts developed and currently compiled at the Board. Some were requests for the publication of materials that are in fact already available, or will be shortly, either through publication in the Federal Reserve Bulletin or in the flow-of-funds supplements that may be obtained from the Flow-of-Funds Section, Division of Research and Statistics. For example, the seasonally unadjusted figures are available in all supplements, and back runs of revised estimates have been available on request pending new supplement publications. Preliminary estimates, based on incomplete information and not considered appropriate for Bulletin publication, are to be regularly released in a special supplement. Reconciliations to relevant key series in the national income accounts are now incorporated, to a great extent, in the basic flow-of-funds publication in the Bulletin and are also to be made available in the supplements.

Another group of comments recommended the integration of the flow-of-funds accounts and the national income accounts. It was not clear from the comments whether the extent of the substantive integration already achieved is fully realized and taken into account. There are a few minor differences remaining that will be ironed out in time. A more serious problem than substantive integration is providing a form of publication and presentation that will maximize the usefulness of the accounts for the various kinds of analytic questions to which they are directed. Here there is undoubtedly room for considerable improvement; this is a matter of concern to us and is the subject of continuing study.

The basic quality of the flow-of-funds estimates was not commented on specifically and relatively few comments were made on

financial statistics in general. The flow-of-funds accounts, it may be noted, are almost entirely dependent on financial data collected by other agencies for other purposes. Considerable statistical improvement in the flow-of-funds system could be achieved by improvements in some of the basic data, improvements needed for other purposes as well.

The need for savings statistics broken down by various characteristics of the saver was referred to by several writers and, as usual, important differences of view were evident as to the best way to obtain reliable information, whether through direct field surveys of savers or through the records of intermediaries. This area presents unusual difficulties of movement and more than one approach may be indicated. The Board's staff at present is carrying forward analyses of the Survey of Financial Characteristics conducted in 1963, with reinterviews in 1964.

The Federal Reserve System is of course responsible for many of the statistics compiled on banking, money supply, and related financial matters directly bearing on the conduct of monetary policy. We are very much aware of our responsibilities to the public in this area, and are working continuously to improve the usability of existing data through better presentation as well as through improvement in seasonal adjustment procedures and periodic revisions in the detail and coverage of current reports. We are also aware of major gaps in financial reporting, and are moving ahead as rapidly as possible to improve knowledge in such areas as measurement of credit cost and availability, credit quality, and the frequency and detail of mortgage credit statistics. Most important of all, however, is the System's attempt, through the study of monetary linkages and financial relationships, to identify the major analytical needs for financial statistics and to establish a rational ordering of priorities with respect to these needs.

One of the suggestions made most frequently, chiefly with reference to nonfinancial data, was that information now available on a national basis should be put on a regional or local basis, as by States, metropolitan areas, "functional economic units," or "Zip code" areas. One respondent suggested that "Federal Reserve indexes of industrial production by major industry, by region, could be useful." Another thought that man-hours and electric energy consumption data might be used in measuring regional activity. In recent years the Federal Reserve System has been developing regional electric power consumption data by industry and has been experimenting with their use in measuring production. The work is being continued as an aid not only to study of regional developments but also as an aid to measurement of industrial production nationally.

Several writers discuss problems of industrial classification. One takes exception to the classification of chemicals used in the Board's index of industrial production; when the index is next revised classifications will be made to conform closely to the present three-digit boundaries.

Mention was made of the usefulness of production information in real as well as current dollar form; no mention was made of problems in reconciling different measures of real (constant dollar) output now compiled from different types of data. The Board's staff is continually exploring means for further improving its measures of real production by industry, doing extensive research work with the Bureau of the Census in developing benchmark measures and examining alternative current measures of output in particular industries and in broad areas of goods production.

The scope of subjects covered by other comments in the compendium is wide and it is obvious that the respondents approached the problem of needed improvements from varied points of view. One writer called particular attention to the opportunities that electronic computers offer for improving data and their interpretation; on the basis of several years of experimentation, the Board is still making increasing use of electronic computing—and also of electronic charting. Another writer placed great emphasis on types of data that can be obtained by sample surveys. The Board has engaged in considerable work of this type. But in general, different methods of collecting and processing data seem to be indicated for different purposes.

In every case attention should be given to the analytic purposes for which information is needed. The intended analytic uses of statistical information should be the determinant of what types of data should be collected, how detailed they should be, how they should be classified and how they should be published. We should find it useful, in this connection, to have at hand a compendium of the responses to your inquiry.

Sincerely,

DANIEL H. BRILL,
Director, Division of Research and Statistics.

