

SPECIAL ANALYSIS F
PRINCIPAL FEDERAL STATISTICAL PROGRAMS

This Special Analysis provides an overview of the major statistical programs of the Federal Government. It includes the complete budgets of four statistical agencies and those portions of other agency budgets which are devoted to statistics.

This year there is a continuing emphasis on providing data of better quality, timeliness, and coverage to meet demands of Government and the public in planning and policy formulation. A new program will be included to collect energy production, inventory, reserves, and resources information from industry. In addition, much data will be developed as a part of the petroleum allocation program. Concerns about economic stabilization, transportation, and the environment have intensified the demand for improved data. The 1975 program is particularly responsive to these concerns.

The 1975 budget for current statistics provides for an increase of 11% from \$353.7 million to a level of \$392.4 million. The increase for 1975 is directed primarily to new programs in economic statistics in the areas of production and distribution of economic goods and services, indexes of prices and wages, and measurement of the domestic economic activity and the Nation's international transactions.

Current statistics in the social and demographic areas will increase moderately after a recent period of relatively rapid growth. There will, however, be a significant redeployment of resources within these areas.

Total periodic programs will decrease in 1975, from \$32.2 million to \$29.7 million; completion of major tasks associated with the 1972 economic censuses and the decennial revision of the Consumer Price Index will be partly offset by increases in funds for the 1974 Census of Agriculture and the preparation for the 20th decennial census of population and housing.

Table F-1. OBLIGATIONS FOR PRINCIPAL CURRENT STATISTICAL PROGRAMS, BY BROAD SUBJECT AREAS (dollars in millions)

	1973 actual	1974 estimate	1975 estimate
Labor statistics.....	57.1	64.8	69.7
Prices and price indexes.....	12.5	13.8	16.6
Production and distribution statistics.....	64.7	70.9	90.3
Construction and housing statistics.....	11.4	13.8	15.5
National economic and business financial accounts.....	21.5	26.7	28.7
Subtotal for economic statistics.....	167.2	190.0	220.8
Health-related statistics.....	72.4	81.4	83.9
Population statistics.....	11.4	6.7	7.4
Educational statistics.....	15.2	16.2	15.4
Criminal justice statistics.....	18.6	21.3	23.4
Social security and welfare statistics.....	12.2	18.7	21.2
Environmental statistics.....	20.3	19.4	20.3
Subtotal for demographic and social statistics.....	150.1	163.7	171.6
Total, principal current programs.....	317.3	353.7	392.4

ECONOMIC STATISTICS

Labor statistics.—For the past 3 years funds have been provided to design a general wage index which will be unaffected by changes in the amount of overtime or part-time work or changes in industrial or occupational mix. The design will be completed this year. The 1975 budget includes \$500 thousand to begin data collection for the index. It is expected that the general wage index will be published in 1976 and will appear monthly. An additional \$650 thousand is provided to improve the quality of the survey which is used to establish comparability between private and Federal compensation for similar levels of responsibility. Particular emphasis will be placed on achieving a better match between occupations surveyed in the private sector and Government occupations.

In 1975, the Government's statistical agencies will take initial steps toward improving their capability to measure personal income, income distribution, and consumer expenditure patterns. The Census Bureau will intensify efforts (\$326 thousand) to improve the measurement of personal income. Initial emphasis will be on components of cash income particularly public assistance payments, property income, and employee pensions. Some experiments in seeking better ways of measuring noncash income will also be undertaken.

As a companion project, the Bureau of Economic Analysis will undertake to extend and maintain on an annual basis its estimates of the size distribution of both cash and noncash personal income (\$189 thousand).

The Bureau of Labor Statistics (BLS) will initiate planning for a survey to gather current information on patterns of consumer expenditures (\$100 thousand). Because of the need to relate income and expenditure data in the analysis of consumer units as centers of economic activity, interagency planning for improved income and expenditure data will consider interrelationships between the income and expenditure projects.

Prices and price indexes.—During 1975 BLS will continue work on the major revision of the Consumer Price Index (CPI), described below under periodic programs. Expansion of the number of items priced monthly rather than less frequently, a program for which funds were provided in 1974, will improve the accuracy of the current CPI in 1975. In addition, major improvements will be undertaken in the Wholesale Price Index and the Industry Sector Price Indexes (\$400 thousand). These include reweighting the indexes to reflect values of shipments of commodities reported in the 1972 economic censuses, expanding the use of probability sampling techniques, and expanding industry coverage. Progress will continue to be made in expanding coverage for export and import price indexes (\$450 thousand). The plan for 1975 is to increase coverage of export prices from 30% to 40% of total exports and of import prices from 15% to 25% of total imports.

Production and distribution statistics.—Several programs of the Department of Agriculture relate to the deep concern over recent food price increases and the need for more accurate data upon which to base forecasts of supply and demand for food and fibers. The budget

provides \$735 thousand for the Statistical Reporting Service to expand surveys of hogs and cattle on feed to cover 95% of U.S. production. The program to measure weekly export sales of wheat, flour, feed grains, oil seeds, and cotton, required by the Agriculture and Consumer Protection Act of 1973 and assigned to the Statistical Reporting Service (\$450 thousand), has been substituted for a similar effort at the Department of Commerce. Finally, an addition of \$190 thousand provides for the evaluation of remote sensing methods using NASA satellites to collect data on agricultural land use and potential yields.

The Economic Research Service will study the cost factors involved in producing wheat, feed grain, and dairy products (\$885 thousand).

About \$5.3 million is provided for statistics and studies which relate to the supply and demand for energy. Most of this amount will go to Interior's Office of Energy Data and Analyses, which will become part of the new Federal Energy Administration once the necessary legislation is obtained. These funds (\$5.0 million) will be used to analyze existing energy data necessary for the development of a U.S. energy policy and to explore ways for improving basic statistics on energy. The Office will assemble information on reserves and utilization, forecast supply and demand conditions, develop analytical models, and study policy alternatives. The Bureau of Mines will use an additional \$300 thousand to enhance the existing data base on mineral resources and the cost of extraction.

This Nation lacks adequate information on the movements of people and commodities by various modes of transportation. Such information is crucial to the development of an efficient nationwide transportation system. In 1975, the Department of Transportation will sponsor a Census Bureau survey of commodity movement by mode of transportation, with data on costs and on measures of effectiveness including time in transit (\$1.5 million). The movement of people will be the subject of a smaller effort (\$585 thousand) designed to evaluate and plan for changes in service and facilities. Additional projects for measuring the effect on highway safety of various programs are mandated by the Highway Safety Act of 1973 (\$1.5 million).

The development of policies to assure economic stabilization at a high level of employment rests to a large extent on information about the present state of economic activity. The Census Bureau will initiate an annual survey of industrial productive capacity (\$133 thousand) which will serve also as a benchmark to the Federal Reserve's quarterly capacity measure. The Bureau of Economic Analysis is provided with \$133 thousand to study the timing of the economic impact of governmental fiscal policy decisions.

An additional \$943 thousand is proposed for the Bureau of the Census to complete the developmental work on the industrial directory and to apply it to statistical activities. The directory will be a computer file of industrial enterprises and establishments and will contain address, size codes, industrial classification, form of organization and company affiliation for each business unit listed. The directory will improve consistency of industrial classification of firms by the statistical agencies, increase the efficiency of sample selection, and reduce the burden on business of reporting to several different agencies information for classifying establishments by industry.

Construction and housing statistics.—An additional \$1.1 million is provided to the Department of Housing and Urban Development for the first full year of operation of the annual housing survey. The regular annual program will include collection of information on housing characteristics and quality for the Nation and for a panel of 20 metropolitan areas. Twenty new metropolitan areas will be added in 1976 and in 1977. In this way 60 areas, including about 50% of the Nation's population, will be included in a 3-year collection cycle. A rural supplement will make possible a detailed analysis of rural housing characteristics.

National economic and business financial accounts.—The 1975 budget proposes an additional \$1.3 million to improve statistics relating to the Nation's international economic accounts. Bilateral merchandise trade accounts, which have been developed recently with Canada, will be extended to some other major trading partners (\$450 thousand). An international travel survey will collect such data as origin, destination, purpose, and expenditures of travel to improve the accuracy of the balance of payments accounts and the effectiveness of U.S. travel policy (\$118 thousand). An annual survey of the sources and terms of export financing will enhance our knowledge of the forces determining our balance of merchandise trade (\$100 thousand). Additional funds for Customs Service (\$673 thousand) will upgrade the accuracy of the program being initiated in 1974 to collect data on imports c.i.f.

The Federal Trade Commission will be provided with \$137 thousand, in addition to funds already received, for implementation of a Line of Business report.

DEMOGRAPHIC AND SOCIAL STATISTICS

Health-related statistics.—These activities continue to represent the largest portion of the social and demographic statistics budget. An increase of \$5.5 million is provided for the National Center for Health Statistics. A major feature of the 1975 program is the continued development of a cooperative Federal-State-local health data system under which basic data needed for Federal, State and local purposes will be collected by State and local agencies in accordance with Federal standards and specifications. Initial emphasis will be on vital statistics, health manpower and health facilities statistics. The National Center for Health Statistics will also begin work on developing the capability to collect and analyze data on the economics of health care.

Other changes in health-related statistics reflect increases for monitoring systems in areas where Federal programs or responsibilities have been expanding, such as on cancer surveillance (\$0.8 million) and adverse drug reactions (\$0.5 million). Further strengthening of health insurance statistics will provide more timely information on services and costs in the Medicare program (\$0.5 million). Detailed data will be made available concerning hospitalization, physicians' incomes and the utilization of services by type of provider, area, and the characteristics of recipients.

Drug abuse statistics.—An overall reduction of \$2.4 million for statistics related to drug abuse reflects the elimination or curtailment of provisional data programs and their replacement by more perma-

ment systems. The Alcoholism, Drug Abuse, and Mental Health Administration in the Department of Health, Education, and Welfare is now assuming responsibility for a greater share of drug abuse statistical activities with a transfer of activities from the Special Action Office for Drug Abuse Prevention.

Educational statistics.—The 1975 budget provides \$15.4 million for the statistical program of the National Center for Educational Statistics. The largest portion of this program will finance continued development of the national assessment of educational progress, an ongoing program to measure educational achievement in the United States. A continuation of the longitudinal study of the high school class of 1972 will yield additional information about the transition of young people from school to the world of work. A research and developmental effort will be undertaken to ascertain the need for and the most appropriate mechanism to gather information about the eligibility for and participation in federally sponsored education programs. The Center will also begin a new program to improve the quality and timeliness of statistics on elementary and secondary education.

Income maintenance and welfare statistics.—The major development in this area is the continued establishment of an adequate data base for the adult welfare programs for the aged, blind, and disabled which have now been federalized (\$1.0 million). This effort will include followup interviews with a panel of respondents first interviewed prior to initiation of the federalized program to provide comparisons of program impact on different population groups. Additionally, a longitudinal comparison of the status of beneficiaries and applicants will be obtained through the development of a continuing sample of all applicants for program benefits.

Criminal justice statistics.—The main programs in this field are crime victimization surveys to develop more complete and meaningful measures of crime against individuals and small businesses and a "crime transaction" statistics program to monitor the functioning of the criminal justice system. These programs will be stabilized in 1975 at the 1974 level. In addition, support will be provided in this field to expedite and control the data flow among States and the Federal Government (\$2.0 million).

Environmental statistics.—The Environmental Protection Agency (EPA) conducts a wide range of systematic surveys to establish sound information on air, water, noise, and pesticide pollutants and their impact on the environment. EPA's surveys on the effect of air pollution on health will be expanded in 1975 to obtain an improved data base to establish ambient air standards (\$3.0 million). This \$3.0 million increase will be funded by diverting resources formerly used for several other environmental statistical programs. A new survey in this area will be conducted by the Bureau of Economic Analysis to provide estimates of expenditures by industry for pollution controls (\$167 thousand).

PERIODIC PROGRAMS

1977 Census of Governments.—Preparations for the 1977 Census of Governments will be continued in 1975. An important feature of the 1975 program will be a national survey of the information available in offices of tax recorders and assessors to test the feasibility of using this source as a basis for collecting taxable property value data.

1972 Economic Censuses.—The funds requested provide for the completion of the 1972 censuses. They will enable the Census Bureau to complete the tabulation and publication of the remaining volumes, and to evaluate the program. The censuses of manufactures, mineral industries, retail and wholesale trade, services, transportation, and other business, conducted every 5 years, provide a comprehensive description of economic activity at very detailed levels. These data are used by Government agencies for such diverse activities as the examination of the patterns of industrial organization, construction of input-output tables, and benchmarking current statistical series. Funding for 1975 will be reduced by \$10.0 million from the 1974 level.

1974 Census of Agriculture.—The 1974 Census of Agriculture will provide data on approximately 2.5 million farms and will include detail at the county level. Some modifications from the 1969 census will be made in the collection of data on energy use, farm organization, and farm operator characteristics.

Preparation for the Twentieth Decennial Census.—The funds requested for 1975 will provide for continuing preparation for the census of population and housing to be conducted in 1980. Planning will be initiated on improvements in the scheduling and control of operations, further decentralization of data processing, and the determination of changes in subject matter content and questionnaire design. Field pretests will be planned to test new means for extending the use of enumeration by mail in rural areas. As in previous censuses, evaluation studies will be prepared which compare alternative techniques for collection and processing.

Intercensal demographic estimates.—This program will provide estimates of population and per capita income for use by State and local governments between the decennial censuses. The estimates will be based on the 1970 Census, updated by data obtained from the administrative records of social insurance, tax, health, and other programs.

During 1975, population and income estimates will be completed for the States, counties, and local governments eligible for revenue sharing. In addition to their use in revenue sharing, the estimates will be used for the allocation of Federal and State funds, planning for public works, schools, and other public and private programs.

Geographic support for periodic programs.—As part of its preparation for the 1980 Census of Population and Housing, the Census Bureau will extend and improve its standard base maps and computerized address coding guide files. These resources, first employed in the 1970 Census, will reduce the enumeration costs of the next census and

contribute to the improved reliability of the data. The Census Bureau is assisted in this work by local governments which have found the address coding guide to be an important new management tool.

Electronic data processing improvements.—\$4.0 million is included in the 1975 Commerce Department budget to upgrade the complex data processing equipment of the Census Bureau. The benefits of this improvement will include increased speed, capacity, and productivity in data processing, and a reduction of maintenance expense and rerun time.

Revision of the Consumer Price Index.—Major progress is being made in 1974 toward completion of the decennial revision of the Consumer Price Index. Decisions have been reached on methodology for rent collection, outlet selection, and population to be covered in the revised index. The plan is to expand the reference population to include all consumer units within standard metropolitan statistical areas (SMSA's) and in urban areas outside of SMSA's. Decrease in funding for 1975 (—\$5.0 million) indicates completion of major field collection efforts for outlet selection and reweighting the index to reflect consumer expenditure patterns of the past 2 years. Tasks on which major progress will be made in 1975 include selection of revised item, outlet, and specification samples. In addition, BLS will initiate data collection from the revised sample of households from which information on rent and property taxes will be collected. The compilation and evaluation of a test index for the rent component of the CPI will be initiated.

Table F-2. OBLIGATIONS FOR PRINCIPAL STATISTICAL PROGRAMS, BY AGENCY (in millions of dollars)

Agency	1973 actual	1974 estimate	1975 estimate
CURRENT PROGRAMS			
Department of Agriculture:			
• Agricultural Research Service.....	0.4	0.3	0.5
• Economic Research Service.....	4.3	4.8	5.8
• Statistical Reporting Service.....	22.6	24.1	26.9
Department of Commerce:			
• Domestic and International Business Administration.....	5.1	5.1	5.5
• Economic Development Administration.....	.5	.2	.1
• National Marine Fisheries Service.....	2.6	2.5	2.6
• Social and Economic Statistics Administration ¹	34.1	41.0	50.0
Department of Defense:			
• Corps of Engineers.....	1.4	1.5	1.6

See footnotes at end of table.

Table F-2. OBLIGATIONS FOR PRINCIPAL STATISTICAL PROGRAMS, BY AGENCY (in millions of dollars)—Continued

Agency	1973 actual	1974 estimate	1975 estimate
CURRENT PROGRAMS—Continued			
Department of Health, Education, and Welfare:			
Health Resources Administration:			
National Center for Health Statistics.....	16.5	18.5	24.0
• Other Health Resources Administration.....	5.3	4.4	2.5
• National Institutes of Health.....	19.3	18.9	20.0
• Alcoholism, Drug Abuse, and Mental Health Administration.....	6.8	11.3	9.3
• Food and Drug Administration.....	2.4	2.8	3.3
• Center for Disease Control.....	3.1	2.5	2.5
• Health Services Administration.....	1.0	1.3	1.3
• Office of Education.....	15.2	16.2	15.4
• Social and Rehabilitation Service.....	1.4	2.2	2.4
• Social Security Administration.....	18.5	25.1	28.2
• Office of Assistant Secretary for Planning and Evaluation.....	3.6	2.7	2.7
• Department of Housing and Urban Development.....	7.0	8.3	9.3
Department of the Interior:			
• Bureau of Mines.....	2.4	2.6	2.9
• Bureau of Sport Fisheries and Wildlife.....	2.2	2.4	2.3
• Mining Enforcement and Safety Administration.....	1.5	1.6	1.6
• Office of Energy Data and Analysis.....	-----	-----	5.0
Department of Justice:			
• Law Enforcement Assistance Administration.....	16.5	18.9	20.8
• Federal Bureau of Investigation.....	1.5	1.9	2.1
• Drug Enforcement Administration.....	.6	.5	.5
Department of Labor:			
Bureau of Labor Statistics.....	34.9	39.1	47.0
• Manpower Administration.....	19.3	23.6	23.0
• Employment Standards Administration.....	.5	.5	.6
• Occupational Safety and Health Administration.....	4.8	5.1	5.5
Department of Transportation:			
• Office of the Secretary.....	.3	.5	3.2
• Federal Highway Administration.....	3.8	3.8	3.8
• Federal Railroad Administration.....	1.0	1.1	1.0
• National Highway Traffic Safety Administration.....	2.8	4.4	5.9
Department of the Treasury:			
• Office of the Secretary.....	2.8	.6	.1
• Internal Revenue Service.....	15.5	14.0	13.8
• U.S. Customs Service.....	2.3	2.5	3.1
• Civil Aeronautics Board.....	1.4	1.4	1.5
• Consumer Product Safety Commission.....	.3	6.7	5.1
• Environmental Protection Agency.....	20.3	19.4	20.1
• Federal Home Loan Bank Board.....	1.9	2.2	2.4
• Federal Power Commission.....	1.2	1.2	1.4
• Federal Trade Commission.....	.9	1.0	1.1
• Interstate Commerce Commission.....	.8	.8	.8
• National Science Foundation.....	2.4	2.6	2.3
• Securities and Exchange Commission.....	.5	.6	.6
• Special Action Office for Drug Abuse Prevention.....	3.8	1.0	1.0
Total current programs.....	317.3	353.7	392.4

See footnotes at end of table.

Table F-2. OBLIGATIONS FOR PRINCIPAL STATISTICAL PROGRAMS, BY AGENCY (in millions of dollars)—Continued

Agency	1973 actual	1974 estimate	1975 estimate
PERIODIC PROGRAMS			
Department of Commerce: Social and Economic Statistics			
Administration			
1972 Census of Governments.....	1.3	.9	.4
1977 Census of Governments.....			.4
1972 economic censuses.....	8.8	13.2	3.2
1974 Census of Agriculture.....		1.9	8.4
19th decennial census.....	13.2	1.4	-----
20th decennial census.....		.6	2.8
Intercensal demographic estimates.....		2.0	1.4
Geographic support.....			2.2
Computer, administrative, and other expenses.....	4.3	1.5	5.1
Department of Labor: Bureau of Labor Statistics:			
Revision of Consumer Price Index.....	8.0	10.7	6.2
Total periodic programs.....	35.6	32.2	29.7
Total principal statistical programs.....	352.9	385.9	422.1

● = Covers only funds for agency's statistical activities.

¹ Includes Bureau of the Census and Bureau of Economic Analysis.

SPECIAL ANALYSIS G

PRINCIPAL FEDERAL STATISTICAL PROGRAMS

An overview of major statistical programs of the Federal Government is presented in this special analysis.

In the 1976 budget there is a special emphasis on improvements in statistics which are needed by economic policymakers, especially those series which have deteriorated because of inflation or which will aid in understanding inflation better. A second area of emphasis is improvement in local area statistics; in particular, improved estimates of unemployment, estimates of children in poverty by State, and current population estimates for revenue sharing. Allowance is also made for selected improvements in other major program areas.

The 1976 budget for current statistics provides for an increase of 10% from \$449.3 million to a level of \$492.5 million. The increase for 1976 includes \$7.4 million to respond to the needs related to inflation and \$11.5 million for improvements in local-area measurement. Together these initiatives account* for 44% of the total increase in current programs.

Total periodic programs will increase in 1976 from \$33.2 million to \$36.9 million. The major focus of periodic programs during 1976 will be active planning for the 20th decennial census and the 1977 economic censuses and data processing and analysis associated with revision of the Consumer Price Index and the 1974 Census of Agriculture.

The Office of Management and Budget, with the cooperation and participation of the major statistical agencies, is increasing its efforts to improve planning for statistical programs. One of the objectives is the development of a comprehensive plan for statistical programs in the 1980s. In 1976 considerable effort will be devoted to the planning process associated with statistical programs with the expectation that by the conclusion of calendar year 1977 a comprehensive plan for long-range development of statistics will be available for consideration.

A number of interagency committees are presently working to resolve statistical issues relating to problems such as the definition of poverty levels, development of improved productivity measures, establishing data specifications for the 1980 Census, and making improvements in specific data series.

Table G-1. OBLIGATIONS FOR PRINCIPAL CURRENT STATISTICAL PROGRAMS, BY BROAD SUBJECT AREAS¹ (dollars in millions)

	1974 actual	1975 estimate	1976 estimate
Labor statistics.....	61.9	78.7	82.9
Prices and price indexes.....	13.4	17.5	19.6
Production and distribution statistics.....	67.9	78.8	90.2
Housing and construction statistics.....	13.9	15.0	17.1
National economic and business financial accounts.....	35.7	36.6	40.1
Energy statistics ²	8.7	28.0	28.4
Environmental statistics.....	25.8	32.2	31.9
Subtotal for economic and related statistics.....	227.3	286.8	310.2
Health statistics.....	82.6	90.0	94.1
Population statistics.....	6.5	5.5	6.8
Educational statistics.....	15.6	21.4	38.7
Criminal justice statistics.....	27.0	30.5	29.3
Income maintenance and welfare statistics.....	12.9	15.1	13.4
Subtotal for demographic, social, and related statistics.....	144.6	162.5	182.3
Total, principal current programs.....	371.9	449.3	492.5

¹ Classifications are based on primary use of statistics.

² Includes items classified differently in previous years.

IMPROVEMENTS IN STATISTICS RELATED TO INFLATION

The preparation of the 1976 statistical budget reflected an important review of the immediate needs of economic policymakers undertaken by the Subcommittee on Economic Statistics of the Economic Policy Board. The subcommittee was particularly concerned with the quality of statistical measurement of: (1) business inventories, (2) export-import prices, (3) wholesale prices, (4) farm income, and (5) wage rates, earnings, and employment levels. The 1976 budget proposes program increases in each of these areas of concern.

Business inventories (\$0.6 million).—The measurement of inventory change has long been troublesome in the estimating of gross national product data. Recent patterns of rapid price changes have highlighted deficiencies in current inventory estimates. Several specific projects have been included in the Social and Economic Statistics Administration's budget to improve the statistics in this difficult area.

A mandatory annual survey of inventories of merchant wholesalers will be introduced for rebenchmarking the monthly inventory estimates and improving the overall quality of the monthly survey.

The Census Bureau will conduct a project to determine whether the monthly wholesale inventory panel could be based on a fixed panel of reporters. The present methodology exhibits a bias in wholesale inventory estimates which is suspected to be due to the rotating of firms into and out of the sample.

A detailed survey of the recordkeeping practices of manufacturing firms will be taken to explore inventory valuation methods and the frequency of physical inventory calculations with special attention to some of the more volatile industries.

A feasibility study will be conducted to see whether the monthly retail inventory panel can be expanded from 2,000 reports per month to 15,000 reports per month by adding the inventory questions to the monthly retail sales survey without reducing the quality of the retail trade estimates.

Expert consultants and Government statisticians will be employed to explore in depth the most pressing issues in inventory statistics methodology and to make recommendations concerning future avenues of improvement.

Export-import prices (\$1.2 million).—With the growing importance of foreign trade and the policy implications of rapidly changing world prices, it is important to improve export-import price data. The 1976 budget includes funds to speed up the program of the Bureau of Labor Statistics so that 60% of exports and 40% of imports will be covered by the end of the period.

Wholesale prices (\$0.5 million).—Planned improvements in the Wholesale Price Index for 1976 include expansion of the use of probability sampling, accelerating the program to obtain transaction prices where list prices are currently being reported, and improvement in the underlying concepts including more attention to the stage of processing approach. New weights, based on the 1972 economic census, will be employed.

Farm income (\$3.6 million).—Estimates of farm income for 1973 were significantly revised in June 1974. Some of the important components are available currently while others, available only with a long time lag, must be estimated based on the continuation of past relationships. When the data which had been estimated became available in 1974, it appeared that past relationships had been broken in serious and significant ways. For example, rapid changes in prices caused farmers to change their inventory behavior. New steps are therefore required to develop more timely and accurate statistics to measure this phenomenon.

The highest priority for the Economic Research Service of the Department of Agriculture in 1976 will be the development of an annual economic survey of farmers. This survey will include data on marketing patterns, ownership of inventories on and off the farm, purchases and sales of livestock, inventories of purchased inputs at the end of the taxable year, and the cost of production of cattle and hogs. The Statistical Reporting Service will develop and maintain a comprehensive list sample frame of farmers for this and other surveys.

Wages, earnings, and employment (\$1.5 million).—In order to develop more consistent and complete data on wages and employment to meet the needs of policymakers and private decisionmakers, the Bureau of Labor Statistics will undertake or continue several projects in 1976.

The General Wage Index program will be expanded from its current industry coverage, which focuses on the private nonfarm sector, toward the goal of including all sectors of the economy. Research on nonwage costs will be undertaken.

Resources are recommended for the current employment statistics program to conduct research and experimentation to test alternative approaches for counteracting a downward bias in current employment estimates believed to be due to failure to include new establishments in the program sample during the period of initial hiring. In addition, the quality of the sample used for preliminary estimates will be strengthened and research on sample and estimation methodology will be conducted. Instead of mail, teleprocessing techniques will be used by States to send data to the Bureau of Labor Statistics.

Funds are recommended to develop revised procedures for processing State quarterly employment and payroll data (the ES-202 program) and for monitoring State performance to improve the timeliness and quality of the data, which are important for making wage estimates in the national accounts and for benchmarking the current employment statistics (790) program.

IMPROVEMENTS IN LOCAL-AREA ESTIMATES

Population, per capita income, and government expenditure estimates.—In the past few years there has been significant legislation which requires the Census Bureau to provide official estimates between censuses. The Federal Election Campaign Act of 1971 (Public Law 92-225), for example, requires annual estimates of the voting age population by congressional district. General revenue sharing requires periodic estimates of the population, per capita income, and government revenue for approximately 39,000 governmental jurisdictions. The Census Bureau will generate the required estimates using a variety of sources such as birth and death registration, school enrollment, building permits and demolitions, social security data, Immigration and Naturalization Service data, Internal Revenue Service data, and other information available from local sources.

In 1976 the Census Bureau will obligate approximately \$2.3 million, an increase of \$0.6 million over the 1975 level, to generate population estimates and estimates of per capita income; an additional \$1.3 million will be used to conduct a survey of revenues of States and local units of government.

Unemployment estimates.—National unemployment estimates are developed through the Current Population Survey (CPS), a household survey conducted by the Bureau of the Census for the Department of Labor. In 1975 the Department of Labor provided for the design of an expanded CPS sample to obtain data for each State that could be used both directly as inputs into the distribution formulas for the Comprehensive Employment Training Act of 1973 (CETA) and as State-level controls against which State and local-area data developed through the use of administrative records could be benchmarked. For 1976 the Manpower Administration will provide funding from CETA title III funds to produce such data for all States on an average annual basis. It is expected that this sample augmentation—

principally to take place in the less populous States—will also improve the national data with regard to minorities.

Children in poverty.—The educational amendments of 1974 require that a survey be conducted to provide current State estimates of the number of school-age children (ages 5–17) living in families with incomes below the poverty threshold. Data from this survey, conducted by the Bureau of the Census in consultation with the Department of Health, Education, and Welfare (DHEW) are scheduled to become available late in calendar 1976.

A simultaneous research effort is being carried out by the DHEW and the Department of Commerce to determine the feasibility of providing updated counts of the number of children from families in poverty by school district in order to make adjustments in grants which local education agencies receive under title I of the Elementary and Secondary Education Act of 1965.

STATISTICAL IMPROVEMENTS IN MAJOR PROGRAM AREAS

SOCIAL STATISTICS

Health statistics.—A \$3.6 million increase is provided for the National Center for Health Statistics (NCHS) in 1976. With this increase, NCHS will continue development of a Federal-State-local cooperative health statistics system. In this system responsibility for identification of the data elements to be collected and the costs of this collection will be shared by the three levels of Government. The data elements are chosen to meet the needs of the Federal Government as well as those of the State and local governments. Responsibility for collection of the data eventually will lie with the States and localities.

Other changes in health statistics reflect increases in areas where Federal programs or responsibilities have been expanding. The Consumer Product Safety Commission has an additional \$1.6 million to fulfill the requirement of the Consumer Product Safety Act of 1970 to estimate and analyze the economic impact of proposed standards and regulations on both industry and the consumer, and to encourage additional input from consumers on products which may represent unreasonable risks of injury to consumers. The Center for Disease Control has a \$1.5 million increase for maintenance of its surveillance system on occupational hazards, injuries, and illnesses resulting from the work environment, and statistical analysis of the coal mine medical examination program. The statistical activities of the National Cancer Institute have been increased \$0.5 million for environmental carcinogenesis studies, completion of the third national cancer survey, studies of high-risk groups, and studies of the relationships between cancers, congenital defects, and other diseases. The statistical activities of the National Heart and Lung Institute have also been increased (\$0.3 million) to give added statistical support to the three major ongoing clinical trials. These trials are important for prevention and treatment of cardiovascular disease.

Educational statistics.—The 1976 budget includes an increase of \$8.9 million for the statistical activities of the National Center for Educational Statistics (NCES). Significant new activities of the Center will

include several new surveys and the establishment of an interagency consortium to provide Government agencies, the Congress, and the public better access to educational data. The new surveys deal with: (1) types of education outside of the traditional primary, secondary, and higher education sequence; (2) teacher supply and demand; (3) educational needs of individuals of limited English-speaking ability; and (4) longitudinal observation of the high school class of 1978. The national assessment of educational progress and Federal/State cooperative statistical programs will continue to be major activities of NCES.

Several major educational surveys required by the educational amendments of 1974 will be initiated by other agencies. The Office of Education (OE) will initiate a longitudinal study to assess the sustaining effects of title I of the Elementary and Secondary Education Act of 1965. OE will also conduct a survey to ascertain the rates of participation of economically and educationally disadvantaged children in title I programs. The National Institute of Education will study the purposes and effectiveness of compensatory education programs in the Nation. The Bureau of the Census will conduct a special study to produce State estimates for 1976 of the number of children 5-17 years of age from families in poverty.

Income maintenance and welfare statistics.—A net decrease of \$1.7 million for income maintenance statistics reflects the completion of field work and initial data processing for the survey of the low income, aged, and disabled population, and a number of the surveys of the disabled. The decrease of \$2.3 million in these areas was partially offset by an increase of \$0.5 million in surveys of the social and economic status of the retired population and of young survivors and other young beneficiaries. The 1976 budget provides for continued work on the planning and development of an improved data base for the program of aid to families with dependent children and for better information about the types of social services provided. Funds are also provided for small projects designed to improve the measurement of noncash income, the preparation of special poverty tabulations, and further extension of the longitudinal study of family economics.

Criminal justice statistics.—The 1976 budget provides \$29.3 million for criminal justice statistics programs in the Department of Justice, a net decrease of \$1.2 million from 1975. The Federal-State-local cooperative statistics program, however, will continue to receive priority attention within the Law Enforcement Assistance Administration (LEAA). These funds enable the States to develop comprehensive crime and criminal justice statistics and provide the mechanism for analysis for planning and evaluation. LEAA funds will continue to provide sample data on the incidence of common crime, its costs, and characteristics of victims and criminal events. Efforts will continue to improve further the scope and quality of the uniform crime reports of the Federal Bureau of Investigation. Early warning on the abuse of some 2,500 dangerous drug substances will be provided by 1,300 early warning facilities located in 29 metropolitan areas established by the Drug Enforcement Administration.

ECONOMIC STATISTICS

Wage statistics.—In 1976 the Bureau of Labor Statistics will undertake improvements in the professional, administrative, technical, and clerical wage survey (PATC), which is used for establishing comparability between Federal and private pay systems (\$0.4 million). It is anticipated that bonus payments will be included in the survey, and the industry and establishment-size scope will be expanded.

Production and distribution statistics.—Improvement and updating of the sample panels are proposed for the current surveys of retail, service, and wholesale trade to reflect the 1972 revisions in the standard industrial classification and the information collected in the 1972 economic censuses on kind of business, geographic area, and size of firm or establishment. These new samples, to be developed for introduction in 1977, will insure continued comparability and usefulness of the information derived from these important up-to-date measures of the state of the U.S. economy (\$1.0 million). Funds are budgeted to initiate a rotating series of benchmark surveys of industries for which complete information is required more frequently than every five years. Industries which are important users of scarce resources, such as fuel and water, will be surveyed more frequently than other industries, although the program provides for some flexibility in scheduling as new situations arise (\$0.4 million).

The Department of Agriculture's Statistical Reporting Service will continue its research cooperation with the National Aeronautics and Space Administration into the practical use of signals transmitted by the Earth Resources Technology Satellite (ERTS-1) for generating information on agriculture production as related to ground truth (\$0.6 million).

A pilot test of a survey of the performance, costs, capacity, and other aspects of the nonfarm portion of the food industry will be made to determine whether it would be productive to add such questions to the economic censuses or to conduct other surveys (\$0.3 million). The statistical portion of an Economic Research Service study to explore the factors influencing foreign demand for U.S. agricultural exports will require \$0.2 million.

The budget also includes \$1.3 million for the Agricultural Research Service to initiate a national food consumption survey which will provide information for monitoring trends in food consumption, determining the nutrient value of diets of various population groups and income levels, and facilitating the development of programs in food production, marketing, and distribution. One of the most important applications of data from this survey is its use in the estimation of the population in poverty.

Several programs which contributed marginally to the Statistical Reporting Service's mission, e.g., surveys of timber prices, mushrooms, mink, and floriculture production, will be discontinued in 1976 (—\$1.0 million).

National economic and business financial accounts.—The recently initiated program to develop information on commodity imports valued inclusive of ocean insurance and freight charges (c.i.f.) will be

enhanced by collecting data on the imports from foreign affiliated companies valued as though the importer and the exporter were not related (arms-length transactions). In addition, expansion in U.S. international commodity trade is expected in 1976 to result in a 20% increase over 1974 levels in the number of import and export documents to be processed by the Census Bureau, only part of which can be accommodated by increases in productivity (\$1.4 million). Funds are programed to complete the benchmark survey of foreign direct investments in the United States as required by the Foreign Investment Study Act of 1974 (\$0.5 million). This survey, including information on financial, employment, and operating data as well as detailed balance-of-payments and investment position data, will be coordinated with a similar survey on foreign portfolio investment in the United States to be conducted by the Treasury Department under the exchange stabilization fund.

In recent years, the Bureau of Economic Analysis (BEA) has developed, improved, and updated the methodology for producing annual estimates of the distribution of the comprehensive personal income component of the gross national product accounts, classified by size and family characteristics, including money and nonmoney income. In 1976, this series will be established as an annual publication with a large amount of detail on the type of income received and the age, race, and sex classifications of the recipient individuals and families. In another BEA effort, the national input-output tables will be expanded to add detail on the use and production of energy and other potentially scarce materials. This information will be useful in evaluating the impact on U.S. energy consumption of alternative policies and of different industry growth patterns (\$0.5 million).

Housing and construction statistics.—An additional \$2.1 million for construction and housing statistics principally reflects the increased cost of the annual housing survey during 1976. Tabulations for 1973, which was the first year of the national sample, will be released in March 1975. An advance report of the data for 1974 is scheduled for release during the summer of 1975. The basic construction and housing statistics program includes statistical series on construction activity, building permits, housing starts, construction progress, alterations, repairs, and construction price indexes.

Energy statistics.—In previous special analyses, energy and energy-related data have been included in the various other subject areas within economic statistics. This year, however, because of their national importance and interest, single and joint-purpose statistics relating to energy are displayed separately. The principal collectors of energy information include the Bureau of Mines (Department of the Interior), the Federal Power Commission and the Bureau of the Census. The focal point for energy (and energy-related) statistics, however, is the Federal Energy Administration (FEA). During 1975, FEA organized and began operation of the National Energy Information Center which serves as the interagency clearinghouse for energy information. In addition, the Federal Energy Administration's Office of Data collects information not provided by other sources, analyzes

and evaluates requirements for energy data, and prepares reports and disseminates information. Particular responsibilities include reports required by Congress, such as the independent petroleum reserves survey and a market shares analysis for branded versus nonbranded gasoline at the wholesale distributor and retail levels.

Other functions, performed in the Office of Policy and Analysis, include data processing support for the fuel allocation program, analytical support for Project Independence, and developing and refining long-range supply/demand balancing models. For 1976, additional initiatives include evaluation of data related to the impact of alternative energy policies on individuals in different income groups.

Environmental statistics.—The major program areas of the Environmental Protection Agency (EPA) (air, water, noise, and pesticides) continue to be supported by the collection of regulatory data and special statistical surveys. During 1975 a number of experimental surveys have also been undertaken to coordinate energy/environmental evaluations for power generation plants, to assess community perceptions and implicit economic trade-offs in selected pollution abatement areas, and to explore the pollutant sensitivity of the demand for water-related recreation. In addition, other agencies are collecting data with environmental implications, e.g., Bureau of the Census/Bureau of Economic Analysis on expenditures for pollution abatement and Bureau of the Census/National Science Foundation on industrial research and development for pollution abatement. Funding in 1976 will provide opportunities for improved data retrieval and coordination within EPA, enhanced quality control of surveys to be conducted, and increased interagency coordination of data relating to the environment.

PERIODIC PROGRAMS

1977 Census of Governments.—Preparation for taking the 1977 Census of Governments will continue in 1976 with questionnaire design, planning for the processing of the data, and an identification, count, and classification of all local governmental units.

1977 economic censuses.—Funds are provided to conduct the initial work for the 1977 economic censuses, which are central to producing estimates of the national economic accounts, Industrial Production Index, and input-output tables. Plans and specifications will be developed for collection, processing, and publishing, and the content of the survey forms will be reexamined. The Census Bureau will conduct feasibility studies to determine which of the items recommended in the interim report of the gross national product data improvement project are feasible for addition to the economic census program.

1974 Census of Agriculture.—The quinquennial census of agriculture provides extensive detail on the U.S. food and fibre economy with detail published to the county level. The data collection, processing, and tabulation phases of the 1974 Census of Agriculture,

referring to calendar year 1974, will be largely completed in 1976; many State and local reports will be published; and the evaluation phase will be undertaken.

1978 Census of Agriculture.—Legislation will be proposed to accelerate the conduct of the next census of agriculture and eventually to synchronize the taking of future censuses with the quinquennial economic censuses which are conducted for the years which have two or seven as a last digit. The advantage of this proposal to develop a complete canvass of U.S. economic activity, both agricultural and nonagricultural, referring to the same period is that it facilitates consistent coverage, classification, and nonduplication of economic activities and provides an exhaustive picture of the interrelationships among all sectors of the economy. Under this plan the subsequent censuses would be conducted for 1982 and every 5 years thereafter.

Preparation for the Twentieth Decennial Census.—In 1976 funds are included to continue preparations for the 1980 Census. The efforts over the last several years to provide Federal funds to State and local governments on a formula basis have increased reliance on the census for benchmark data. In addition to population counts other data, such as information on income, family size and composition, and housing conditions, are critical to funding and policy decisions.

1976 is the third planning year for the 1980 Census. A series of pretests is planned to examine: (1) coverage improvement, (2) extension of the mail method of data collection, (3) alternative processing approaches, (4) question wording, and (5) questionnaire formats. The major groups of activities (\$0.8 million) will involve new mapping and related geographic activities, the development of a decentralized processing capability, and improvement in data dissemination vehicles. Liaison between the Census Bureau and various advisory groups will reach a period of maximum activity during 1976.

Periodic programs geographic support.—This program provides the capability to produce data accurately coded by geographic regions of the country by maintaining geographic reference files for small areas and jurisdictions. The boundary and coding guide system is being extended to the present boundaries of each standard metropolitan statistical area (SMSA) including the 37 newly established SMSA's. The geographic base file program will be supplemented in 1976 by the updating of the files for communities with population between 2,500 and 10,000. This activity supports major Census Bureau programs including the forthcoming 1977 economic censuses and other large-scale surveys.

Revision of the Consumer Price Index.—Work is proceeding on schedule toward revision of the Consumer Price Index (CPI). The revision will utilize consumer expenditure weights based on the 1972-73 consumer expenditure survey and will incorporate substantial methodological improvements. During 1976, work should progress to compilation of the revised index on a test basis. Publication of the revised CPI is scheduled for 1977.

Revision of series to 1972 standard industrial classification.—The 1976 budget includes \$1.3 million to increase comparability among statistical series produced by the Federal Government through conversion of all BLS establishment-based series to the revised (1972) standard industrial classification (SIC). Such conversion will permit comparative analyses of current and previous data. In 1976, BLS will initiate retabulation and benchmarking of all national, State, and local series affected by the revisions in the SIC. Major programs affected include the Quarterly Report of Insured Employment and Wages (ES 202), the Current Employment Statistics (BLS-790), and the Labor Turnover Statistics (DL-1219) statistical systems.

Table G-2. OBLIGATIONS FOR PRINCIPAL STATISTICAL PROGRAMS, BY AGENCY (in millions of dollars)

Agency	1974 actual	1975 estimate	1976 estimate
CURRENT PROGRAMS			
Department of Agriculture:			
• Agricultural Research Service.....	.2	.5	1.8
• Economic Research Service.....	4.8	5.8	7.6
• Foreign Agricultural Service.....	.3	.3	.6
Statistical Reporting Service.....	26.0	30.7	34.2
Department of Commerce:			
• Domestic and International Business Administration.....	5.0	5.6	5.8
• Economic Development Administration.....	.8	.5	.5
• National Bureau of Fire Prevention.....	.2	.2	1.1
• National Marine Fisheries Service.....	2.0	2.0	1.9
Social and Economic Statistics Administration ¹	41.4	49.6	55.3
Department of Defense:			
• Corps of Engineers.....	1.5	1.6	1.8
Department of Health, Education, and Welfare:			
• Alcohol, Drug Abuse, and Mental Health Administration.....	14.8	7.0	7.1
• Center for Disease Control.....	2.6	3.2	4.7
• Food and Drug Administration.....	2.2	2.4	2.4
Health Resources Administration:			
• National Center for Health Statistics.....	18.7	22.0	25.6
• Other Health Resources Administration.....	6.7	1.2	-----
• Health Services Administration.....	1.7	1.8	1.8
National Center for Educational Statistics.....	15.6	13.1	22.0
• National Institutes of Health.....	22.3	23.0	23.9
• Office of Education.....	8.3	8.3	16.7
• Social and Rehabilitation Service.....	1.6	2.1	2.3
• Social Security Administration.....	19.4	33.3	29.7
• Office of Assistant Secretary for Human Development.....	.2	.3	.3
• Office of Assistant Secretary for Planning and Evaluation.....	2.1	2.8	3.1
• Department of Housing and Urban Development.....	8.8	8.5	10.0
Department of the Interior:			
• Bureau of Mines.....	2.9	3.2	3.5
• Fish and Wildlife Service.....	4.0	4.3	4.3
• Mining Enforcement and Safety Administration.....	1.6	2.0	2.0
Department of Justice:			
• Drug Enforcement Administration.....	.8	1.1	1.1
• Federal Bureau of Investigation.....	2.0	2.6	2.8
• Law Enforcement Assistance Administration.....	24.8	27.6	26.2

Table G-2. OBLIGATIONS FOR PRINCIPAL STATISTICAL PROGRAMS, BY AGENCY (in millions of dollars)—Continued

Agency	1974 actual	1975 estimate	1976 estimate
CURRENT PROGRAMS—Continued			
Department of Labor:			
Bureau of Labor Statistics.....	38.0	48.4	53.7
• Employment Standards Administration.....	.6	.6	.6
• Manpower Administration.....	20.7	30.1	31.0
• Occupational Safety and Health Administration.....	5.1	5.5	5.6
Department of Transportation:			
• Office of the Secretary.....	1.4	1.7	2.5
• Federal Highway Administration.....	4.0	4.1	4.2
• Federal Railroad Administration.....	1.5	1.0	1.1
• National Highway Traffic Safety Administration.....	7.2	7.8	9.3
Department of the Treasury:			
• Office of the Secretary.....	.1	.6	.1
• Internal Revenue Service.....	16.5	12.4	12.8
• U.S. Customs Service.....	2.9	3.2	3.2
• Civil Aeronautics Board.....	1.5	1.7	2.0
• Consumer Product Safety Commission.....	2.1	4.2	5.8
• Environmental Protection Agency.....	21.4	27.1	26.8
• Federal Energy Administration.....	5.0	23.1	23.1
• Federal Home Loan Bank Board.....	2.2	2.3	2.5
• Federal Power Commission.....	1.5	1.8	1.9
• Federal Trade Commission.....	.8	1.2	1.4
• Interstate Commerce Commission.....	1.0	1.0	1.1
• National Science Foundation.....	2.8	3.3	3.0
• Securities and Exchange Commission.....	.6	.6	.7
• Special Action Office for Drug Abuse Prevention.....	.5	1.0	-----
Total, current programs.....	371.9	449.3	492.5
PERIODIC PROGRAMS			
Department of Commerce: Social and Economic Statistics Administration:			
1972 Census of Governments.....	.7	.2	-----
1977 Census of Governments.....	-----	.4	.6
1972 economic censuses.....	10.4	6.0	-----
1977 economic censuses.....	-----	-----	3.8
1974 Census of Agriculture.....	1.5	8.9	9.1
1978 Census of Agriculture.....	-----	-----	.9
1970 decennial census.....	.7	-----	-----
1980 decennial census.....	.5	2.8	4.3
Intercensal demographic estimates.....	1.6	1.5	1.8
Periodic programs geographic support.....	-----	2.0	2.7
Data processing equipment.....	.7	3.8	4.1
General administration and other.....	1.3	1.0	1.2
Department of Labor: Bureau of Labor Statistics:			
Revision of Consumer Price Index.....	9.6	6.6	7.1
Standard industrial classification revision program.....	-----	-----	1.3
Total, periodic programs.....	27.0	33.2	36.9
Total, principal statistical programs	398.9	482.5	529.4

¹ Includes Bureau of the Census and Bureau of Economic Analysis.
 • Covers only funds for agency's statistical activities.

SPECIAL ANALYSIS G

PRINCIPAL FEDERAL STATISTICAL PROGRAMS

This special analysis presents an overview of the major statistical programs of the Federal Government, as reflected in the 1977 budget. As noted below for many specific programs, the recommended funding levels of the principal Federal statistical programs were developed within the Presidential objective of holding down the rate of growth in Federal spending. As a result, total obligations for current statistical programs will increase by only \$5.8 million, or 1.2% over 1976. Periodic programs will increase by \$7.9 million, or 16.9% over 1976, primarily because of accelerated planning activity for the 1980 decennial census. Total obligations for all principal Federal statistical programs will increase by \$13.7 million, or 2.5% over 1976.

A limited number of program increases are recommended in 1977 to permit improvements in the statistical data base that are essential to more effective Federal policymaking and program management. In most statistical agencies it will be necessary to reduce the resources applied to lower priority statistical programs in order to provide for quality improvement and to offset the rising costs of maintaining many of the basic continuing programs.

In addition to assuring more effective use of dollar resources within the statistical agencies, the Administration, in combination with the Commission on Federal Paperwork, will continue to seek ways to reduce the burden on the American public of completing Federal report forms, including those that are the basis for statistical programs covered in this special analysis. The cost of such reporting is an important factor to many respondents, and the willingness of many individuals and businesses to provide information voluntarily is limited. It is imperative that the reporting burden be kept to the minimum possible, given the need for information.

The Federal statistical system continually strives to increase the accessibility of data series to the public. In response to the President's directive, a new monthly statistical chartbook, focusing on social and economic developments of domestic importance, will be developed for publication prior to 1977. This publication, which will emphasize graphic presentation of statistical series in order to enhance public usefulness, will draw upon the statistical output of all Federal agencies. The purpose of this publication will be to increase public access to and awareness of the vast output of the Federal statistical system and to provide a framework for monitoring important domestic developments to which the statistics relate.

The quality, timeliness, and integrity of Federal statistics are the product of the professional staff engaged in production and analysis of these series. Information on full-time permanent staff for major statistical agencies is presented in table G-1. In addition to these

professional resources directly employed by major statistical agencies, there are many statisticians working in smaller statistical units in other agencies and departments. Their work is complemented by statistical analyses and other professional reviews of the data series as they apply to specific program areas. The staff figures do not cover part-time or temporary employment. The full-time permanent numbers are presented because they are the only consistently defined numbers that are currently available.

The variations in staff levels relative to the program sizes are partially explained by the different natures of the various agency programs. For example, the Bureau of the Census does a great deal of work for other agencies on a reimbursable basis for which no funds are included in the Census Bureau's budget. The National Center for Education Statistics, on the other hand, has proportionately more work done under contract than some of the other major statistical agencies.

Table G-1. PERMANENT POSITIONS BY AGENCY

	1975 actual	1976 estimate	1977 estimate
Department of Agriculture:			
Statistical Reporting Service.....	1, 128	1, 235	1, 279
Department of Commerce:			
Bureau of the Census.....	4, 436	4, 385	4, 444
Bureau of Economic Analysis.....	500	517	539
Department of Health, Education, and Welfare:			
National Center for Education Statistics.....	171	1 191	1 179
National Center for Health Statistics.....	522	1 522	1 522
Department of Labor:			
Bureau of Labor Statistics.....	1, 658	1, 774	1, 864
Total for six agencies reporting.....	8, 415	8, 624	8, 827

¹ These estimated figures are subject to further Departmental review.

In summary, the combination of dollar resources represented in the budget, the cooperation of businesses and individuals in supplying statistical information, and the creativity and analytical ability of professionals in statistical services are all essential to the maintenance and dissemination of high quality statistics which are vital to informed public and private decisionmaking.

Program funding by major subject area is summarized in table G-2 and program improvements within each area are discussed in some detail below.

Table G-2. OBLIGATIONS FOR PRINCIPAL CURRENT STATISTICAL PROGRAMS, BY BROAD SUBJECT AREAS¹ (in millions of dollars)

	1975 actual	1976 estimate	1977 estimate
Prices and price indexes.....	15.1	18.4	24.7
Labor statistics.....	66.0	84.5	83.2
Production and distribution statistics.....	86.3	104.2	110.4
Housing and construction statistics.....	15.8	19.0	19.6
Economic and business financial accounts.....	35.2	40.5	41.0
Energy statistics.....	14.3	18.9	17.6
Environmental statistics.....	30.9	26.2	26.8
Health statistics.....	76.5	89.2	91.2
Education statistics.....	16.6	27.4	21.4
Income maintenance and welfare statistics.....	19.9	21.2	22.9
Population statistics.....	6.3	6.5	7.4
Criminal justice statistics.....	45.2	42.4	38.0
Total, principal current programs.....	428.1	498.4	504.2

¹ Classifications are based on primary use of statistics.

CURRENT PROGRAMS

PRICES AND PRICE INDEXES

Consumer Price Index (\$3.4 million).—The increase in 1977 for the Bureau of Labor Statistics (BLS) provides for a number of improvements in the Consumer Price Index (CPI). The first is the publication of a new CPI covering the entire urban population, as well as a revised index covering only urban wage earners and clerical workers. More than 50% of the value of the items in each index will be priced monthly with virtually all of the rest being priced bimonthly. Thus, the new index will provide a more accurate description of current price movements than is now the case. Publication of these indexes is scheduled to start in 1977. In addition, the funds will provide for a continuing point-of-purchase survey to determine where consumers purchase items priced in the CPI. This survey will provide the basis for updating the sample of outlets from which prices are collected. Further, the increase will provide for the development of a continuing consumer expenditure survey that will reflect more current expenditure patterns of consumers when the CPI weights are revised. The consumer expenditure survey will also provide a continuous body of consumption and income data, classified by characteristics of the population, for use in analyzing changing patterns of consumption.

International price program (\$0.4 million).—Because of the increasing importance of foreign trade and the policy implications of changing world prices, the expansion of the BLS international price program is being continued, adding approximately 15% of the value of U.S. exports and 20% of the value of U.S. imports to the existing coverage. Thus, by the end of 1977, 70% of total exports and 60% of total imports will be covered by the indexes.

Prices received by farmers (\$0.3 million).—Additional funds are provided for the price statistics program of the Statistical Reporting Service of the Department of Agriculture to institute improvements in the estimates of prices received by farmers for grains. Improvements in these statistics are needed because of the increased volatility of today's agricultural prices and changes in domestic and foreign marketing patterns.

LABOR STATISTICS

Employment cost index (\$0.2 million).—The 1977 budget provides an increase to continue expansion of the employment cost index by adding the government sector so that, starting in calendar 1978, the index will reflect changes in employer expenditures for total compensation of labor in all sectors of the economy except private households.

PRODUCTION AND DISTRIBUTION STATISTICS

Agricultural list sampling frame (\$1.9 million).—The Statistical Reporting Service (SRS) of the Department of Agriculture collects a large amount of information on agricultural production and distribution. The sampling methodology that has been developed to enhance the precision of agricultural estimates relies on a multiple-frame approach combining area samples for direct enumeration and list samples for mail surveys. In 1976, SRS obtained funds to initiate the development of a general purpose list sampling frame. An increase in funds provided in 1977 will enable SRS to continue the project of compiling a complete and unduplicated list of potential respondents throughout the United States, including data on size and type of farm operation.

ECONOMIC AND BUSINESS FINANCIAL ACCOUNTS

The economic accounts of the United States, prepared by the Bureau of Economic Analysis (BEA), center around the national income and product accounts, summarized by the gross national product (GNP), and also include wealth accounts, interindustry accounts, regional accounts, and balance-of-payments accounts. The Economic Policy Board's Subcommittee on Economic Statistics has expressed a strong interest in strengthening the quality of the estimates. Strategies to raise quality involve improving the basic data, which are collected largely by other agencies and used by BEA in constructing the estimates, and strengthening BEA's capability to analyze the data.

Inventory statistics (\$0.5 million).—Changes in the business inventories component of GNP are particularly difficult to estimate. In 1977, funds are provided to improve the basic data collected by the Bureau of Census. The Bureau will conduct an annual benchmark survey of inventories held by wholesalers (\$0.2 million). This survey will improve the accuracy of the monthly inventory reports used by BEA in its quarterly GNP estimates. An increase is also provided for a study of the composition and turnover rate of manufacturers' inventories (\$0.3 million). Further improvements in basic data on inventories will require substantial research continuing through 1977.

Local area income estimates (\$0.3 million).—To improve BEA's analytical capability, funds are provided for revising and strengthening the estimates of personal income for States, metropolitan areas, and counties. A major improvement in this series will be the incorporation of new data on dividends, interest, and on nonfarm proprietors' income by county, and the accelerated incorporation of farm income and expenditures information.

Input-output statistics (\$0.2 million).—BEA will also substantially expand the detail in the national input-output tables to provide better information on the production and consumption of different types of energy and other potentially scarce resources. This additional information will be used to evaluate the impact of changes in the level and composition of GNP on requirements for these resources.

Commodity classifications (\$0.4 million).—The 1977 budget includes funds for the Bureau of the Census to improve the comparability of commodity classifications used in collecting data on imports, exports, and domestic production and to carry out other responsibilities mandated by the Trade Act of 1974.

ENERGY STATISTICS

The Federal Energy Administration (FEA), which conducts statistical activities in energy supply, distribution, and consumption to support analytical, policymaking, and regulatory activities, will improve many of its existing data systems in 1977. The estimates presented in this analysis do not reflect the full impact of the recently signed Energy Policy and Conservation Act, which extends many of FEA's regulatory activities and authorizes several new programs in energy conservation. Any funds that may be necessary for activities or programs authorized by this act are covered by the allowance for contingencies.

Other agencies are active in the collection and analysis of energy information. FEA and the Bureau of Mines have recently entered into an agreement, which will be implemented in 1976 and 1977, to pursue cooperative arrangements for monthly petroleum data collection and processing with a minimum of duplication. The Federal Interagency Council on Energy Information, comprised of some 12 departments and agencies, was recently established to enhance coordination and development of energy data systems. The Council will work to achieve better integration of existing data sources throughout 1977.

HEALTH STATISTICS

The 1977 funding level of \$24.0 million for the National Center for Health Statistics is a \$1.6 million decrease from the expected 1976 level. One of the major programs of the National Center continues to be its Federal-State-local cooperative health statistics system (CHSS). The Department of Health, Education, and Welfare's first health statistics plan, developed by the Health Data Policy Committee, emphasized the importance CHSS will play in future collection of health statistics. During 1977, major efforts will be undertaken to

develop standard classifications and concepts to provide for further improvements in health statistics.

Increases in health statistics activities are limited to areas in which Federal programs or responsibilities have been expanding:

Drug abuse statistics (\$3.0 million).—The Alcohol, Drug Abuse, and Mental Health Administration has an increase for a longitudinal followup of clients in federally funded drug treatment centers.

Consumer product safety statistics (\$0.3 million).—The Consumer Product Safety Commission (CPSC) is provided an increase for assessing the impact of proposed standards and regulations on industry and the consumer (\$0.2 million). In total, however, the 1977 CPSC statistical budget shows a \$1.0 million decrease from the 1975 level.

Biomedical research statistics (\$3.9 million).—Within the National Institutes of Health, the National Cancer Institute is provided an increase for statistical programs supporting continued operation of population-based cancer epidemiology research centers, conducting environmental carcinogen studies, and completing the third national cancer survey (\$0.7 million). In addition, an increase is provided for studying high-risk groups and for examining the relationship between cancers, congenital defects, and other diseases (\$1.8 million). The National Heart and Lung Institute has an increase for research on the origins of heart disease and for statistical support of its three major clinical trials (\$0.5 million). The National Institute of Environmental Health Sciences has an increase for data collection to improve the description and prediction of the biological effects of environmental hazards (\$0.8 million).

Medicare statistics (\$0.4 million).—The Social Security Administration will undertake increased analysis of medicare program data from health insurance and related research.

EDUCATION STATISTICS

The 1977 budget for the National Center for Education Statistics is \$13.0 million, unchanged from the 1976 level. The Center will continue to develop its Federal-State cooperative statistical program. In addition, the Center will undertake several surveys including a third followup of the participants in the national longitudinal study of the high school class of 1972. The design of a second longitudinal survey of high school seniors will be undertaken. Work will begin on the development of a study to assess the educational needs of young children. Work will continue on the characteristics of institutions of both collegiate and noncollegiate postsecondary education. The Center has begun to increase its emphasis on analysis, an effort which will intensify in 1977. Areas of especial attention will include the cost of education and the prevalence of handicapping conditions. The Center will continue to make adaptations in Federal analytical models for use by State and local education agencies.

The Office of Education shows a \$6.0 million decrease in 1977, because of the completion of a large-scale survey that estimates the number of children living in poverty households.

INCOME MAINTENANCE AND WELFARE STATISTICS

The total for income maintenance statistics will grow to provide for further strengthening of program evaluation, maintenance of program data bases, and the development of improved capabilities for estimating the population eligible to participate in agency programs.

New income survey (\$1.9 million).—The largest increase is provided to the Department of Health, Education, and Welfare for developmental work for a new income survey that will focus on population groups that are the object of income maintenance programs. This survey, which is expected to be fully operational at the end of the decade, will include data on annual income and assets, as well as income for periods shorter than a year. Data from administrative records will be used to improve estimates of income that is poorly reported in household surveys. Measurement of income of the same family for several quarters will add a crucial dimension to our understanding of the resources available to families over the course of a year.

Retirement history project (\$0.7 million).—Additional funds will provide for the fifth wave of data collection in the retirement history project, which will supply information on the actual changes in the lives of workers as a result of retirement and aging.

Social security statistics (\$1.3 million).—Analysis of the impact of social security and the development of aggregate measures of social welfare expenditures will be intensified (\$0.4 million). Additional funding will also be provided for evaluation of the effectiveness of the social security program through review of beneficiary rolls (\$0.4 million). The social security program data base will be improved through the addition of \$0.4 million. An increase is provided for continued research on disability, using data collected through the operation of the disability insurance program (\$0.5 million). Commitments for special supplements to Census Bureau surveys will decrease by \$0.4 million, because of the completion in 1976 of field work on the congressionally mandated survey of income and education.

Veterans statistics (\$0.5 million).—The Veterans Administration is provided funding for a pretest of a survey on veterans and their widows in 1977 to be undertaken by the Bureau of the Census as part of the current population survey.

CRIMINAL JUSTICE STATISTICS

The largest single activity within the criminal justice statistics area is the comprehensive data system (CDS), a Federal-State cooperative program of the Law Enforcement Assistance Administration (LEAA). Funding for this program has shown a gradual decline from a 1975 high of \$24.2 million to \$18.0 million in 1977. Once activities under the CDS program are implemented, the States assume the responsibility for maintenance funding. Much of the 1977 funding will be expended to implement new privacy regulations promulgated in 1975. These regulations require improvements in the recordkeeping practices of a

significant number of the 46,000 criminal justice agencies in the United States. LEAA also projects expenditures of approximately \$3.1 million to maintain grant management information systems both for the agency and for the State Criminal Justice Planning Agencies.

Altogether, the LEAA program level is \$35.1 million, which is a \$4.1 million decrease from the 1976 level. In addition to a decrease in the CDS program, the basic statistics program of LEAA shows a \$0.7 million decrease in 1977 from the 1976 level.

The Federal Bureau of Investigation (FBI) is provided \$2.6 million in 1977, a reduction of \$0.3 million from 1976. These funds will be used to support the uniform crime reporting program. The FBI and LEAA have been cooperating in the development of a program to transfer the primary responsibility for the collection of data from local police agencies to the States under the CDS program.

PERIODIC PROGRAMS

1977 Census of Governments.—The Bureau of the Census collects information from State and local governments every fifth year on receipts and expenditures, indebtedness, employees, and tax base. The 1977 budget includes funds for expanded data collection on taxable property values, planning for finance and employment data collection, and completion of the governmental organization information base.

1977 economic censuses.—The quinquennial economic censuses provide a comprehensive data base on production, trade, inventories, and economic structure for the Nation's manufacturing, mining, distribution, and selected service industries. These data are widely used for analysis, as inputs to the gross national product and interindustry accounts, and for calculation of industrial production indexes. Funds in the 1977 budget will provide for design and printing of forms and preparation for data collection and tabulation.

1974 Census of Agriculture.—Funds provided in 1977, the final year of this program, will allow for completion of data tabulations and publication of the remaining special, subject matter, and State reports. The data will be tabulated according to both the new and old definitions of a farm to provide a linkage of prior statistics with those to be produced under the new definition.

1978 Census of Agriculture.—Legislation is pending which would accelerate the taking of the next two censuses of agriculture and result in a common base year with the economic censuses in 1982. A common base year will enable more complete analysis of the total U.S. economy and the relationship between the agricultural and nonagricultural sectors. The 1977 funding will permit developing and testing of forms, obtaining lists of respondents, initiating studies on linking with data from nonagricultural sources, and expanding the use of administrative records.

Preparation for the 1980 decennial census.—The major planning and development activities for the 1980 decennial census begin in 1977. A total of \$17.5 million is provided in 1977 for census development, an increase of \$12.5 million over 1976. The expansion and maintenance of the geographic base file and other geographical activities pertaining to the 1980 census will require \$8.0 million. These funds will also be used to conduct boundary and annexation surveys in places with a population of less than 2,500 persons and to develop guides to permit the coding of addresses in places of 25,000 to 50,000 population, places which are not now included in the automated geographic base file.

Funds are also included to continue user education through a program of conferences, workshops, and seminars concerning the access and use of decennial census data; to develop recommendations for 1980 user tape documentation standards; and to design public use samples and public use computer programs to increase the utility of the census results. The 1977 funds will also be used to prepare for the "dress rehearsal" for the 1980 census which will be held in April 1978. Because of the leadtime required, all questionnaires, instructions, and data processing procedures must be virtually completed in 1977. Finally, funds are provided to upgrade the Census Bureau's data processing center in preparation for the heavy workload of the decennial census.

Intercensal demographic estimates.—The intercensal demographic estimates program provides for biennial estimates of the population and per capita income of approximately 39,000 general purpose governmental units. The 1977 budget includes \$1.9 million for this program, a decrease of \$5.0 million from 1976 because of the completion of the coding and processing of place of residence information collected on the 1975 tax forms.

Registration and voting survey.—The Voting Rights Act of 1965, as amended in 1975, mandates biennial surveys of registration and voting in areas with characteristics specified in the act. The 1977 budget provides \$2.7 million for completing the work to be started in 1976 relating to the November 1976 elections.

Table G-3. OBLIGATIONS FOR PRINCIPAL STATISTICAL PROGRAMS, BY AGENCY (in millions of dollars)

Agency	1975 actual	1976 estimate	TQ estimate	1977 estimate
CURRENT PROGRAMS				
Department of Agriculture:				
• Agricultural Research Service.....	0.5	1.9	0.5	1.9
• Economic Research Service.....	5.6	7.2	1.8	7.2
• Foreign Agricultural Service.....	.3	.6	.2	.6
• Statistical Reporting Service.....	28.8	36.4	9.2	38.7
Department of Commerce:				
• Bureau of the Census.....	39.5	41.9	11.0	44.5
• Bureau of Economic Analysis.....	10.0	11.8	3.1	12.5
• Domestic and International Business Administration.....	5.2	5.8	1.5	5.8
• Economic Development Administration.....	.6	.6	.2	.6
• National Bureau of Fire Prevention.....	.3	.8	.2	.8
• National Marine Fisheries Service.....	3.1	3.5	.9	3.5
Department of Defense:				
• Corps of Engineers.....	1.7	1.8	.4	2.0
Department of Health, Education, and Welfare:				
• Alcohol, Drug Abuse, and Mental Health Administration.....	7.7	6.6	.3	9.7
• Center for Disease Control.....	5.4	4.3	1.0	4.1
• Food and Drug Administration.....	2.1	1.9	.5	2.1
• Health Resources Administration:				
• National Center for Health Statistics.....	20.3	25.6	6.5	24.0
• Other Health Resources Administration.....	1.0	1.4	.1	1.4
• Health Services Administration.....	2.8	3.2	.8	3.2
• National Center for Education Statistics.....	7.7	13.0	3.2	13.0
• National Institutes of Health.....	19.4	22.5	5.2	26.4
• Office of Assistant Secretary for Human Development.....	2.6	4.4	1.3	3.0
• Office of Assistant Secretary for Planning and Evaluation.....	2.8	6.3	1.1	5.0
• Office of Education.....	8.9	14.3	-----	8.3
• Social and Rehabilitation Service.....	4.9	5.2	1.3	5.4
• Social Security Administration.....	22.6	25.0	6.7	27.0
• Department of Housing and Urban Development.....	8.8	11.0	2.3	11.3
Department of the Interior:				
• Bureau of Mines.....	10.3	12.2	3.2	12.6
• Fish and Wildlife Service.....	4.3	4.5	1.2	4.7
• Mining Enforcement and Safety Administration.....	1.6	1.2	.3	1.2
Department of Justice:				
• Drug Enforcement Administration.....	1.1	1.1	.3	1.1
• Federal Bureau of Investigation.....	2.2	2.8	.7	2.6
• Law Enforcement Assistance Administration.....	42.7	39.3	9.2	35.1
Department of Labor:				
• Bureau of Labor Statistics.....	47.8	57.8	14.5	67.0
• Employment Standards Administration.....	.5	.6	.1	.5
• Employment and Training Administration.....	16.4	27.9	5.5	22.6
• Occupational Safety and Health Administration.....	5.6	6.0	1.5	6.2
Department of Transportation:				
• Office of the Secretary.....	2.5	3.1	.8	2.9
• Federal Highway Administration.....	4.9	5.1	1.2	4.5
• Federal Railroad Administration.....	.8	1.0	.2	.9
• National Highway Traffic Safety Administration.....	7.1	10.2	2.6	13.2
• Urban Mass Transportation Administration.....	.4	1.4	.3	1.6

See footnotes at end of table.

Table G-3. OBLIGATIONS FOR PRINCIPAL STATISTICAL PROGRAMS, BY AGENCY (in millions of dollars)—Continued

Agency	1975 actual	1976 estimate	TQ estimate	1977 estimate
CURRENT PROGRAMS—Continued				
Department of the Treasury:				
• Office of the Secretary.....	0.6	0.1	-----	0.1
• Internal Revenue Service.....	11.8	13.6	3.4	12.5
• U.S. Customs Service.....	3.2	3.2	.8	3.2
• Civil Aeronautics Board.....	1.8	2.0	.5	2.2
• Consumer Product Safety Commission.....	2.7	1.5	.2	1.8
• Environmental Protection Agency.....	26.0	21.0	5.5	21.4
• Federal Energy Administration.....	9.3	12.1	2.8	10.4
• Federal Home Loan Bank Board.....	2.3	2.7	.7	2.8
• Federal Power Commission.....	1.9	2.5	.6	2.9
• Federal Trade Commission.....	1.2	1.6	.4	1.6
• Interstate Commerce Commission.....	1.2	1.2	.3	1.2
• National Science Foundation.....	3.3	3.0	.6	3.7
• Securities and Exchange Commission.....	.5	.6	.2	.6
• Special Action Office for Drug Abuse Prevention ¹	1.0	-----	-----	-----
• Veterans Administration.....	.5	2.1	.2	1.1
Total, current programs.....	428.1	498.4	117.1	504.2
PERIODIC PROGRAMS				
Department of Commerce: Bureau of the Census:				
1972 Census of Governments.....	.2	-----	-----	-----
1977 Census of Governments.....	.3	.7	.3	3.4
1972 economic censuses.....	5.8	.7	-----	-----
1977 economic censuses.....	-----	3.6	1.5	6.1
1974 Census of Agriculture.....	8.8	9.7	1.5	2.0
1978 Census of Agriculture.....	-----	-----	-----	3.3
1980 decennial census.....	2.0	5.0	2.4	17.5
Intercensal demographic estimates.....	1.4	6.9	.6	1.9
Registration and voting survey.....	-----	1.0	1.0	2.7
Periodic programs geographic support.....	1.9	3.0	.8	2.8
Data processing equipment ²	1.9	5.8	1.0	6.1
General administration and other ³4	1.5	.4	1.6
Department of Labor: Bureau of Labor Statistics:				
Revision of Consumer Price Index.....	6.6	7.3	1.8	5.7
Standard industrial classification revision program.....	.4	1.5	.4	1.5
Total, periodic programs.....	29.7	46.7	11.7	54.6
Total, principal statistical programs.....	457.8	545.1	128.8	558.8

¹ The legislative authority for the Special Action Office for Drug Abuse Prevention expired June 30, 1975.

² Includes capital outlays for large-scale data processing equipment acquisitions.

³ Includes depreciation, other capital outlays, and changes in selected resources.

• = Covers only funds for agency's statistical activities.

SPECIAL ANALYSIS G

PRINCIPAL FEDERAL STATISTICAL PROGRAMS

INTRODUCTION

This special analysis presents an overview of the major statistical programs of the Federal Government, as reflected in the 1978 budget. It includes the entire budgets of four bureaus (the Statistical Reporting Service, the Bureau of Economic Analysis, the Bureau of the Census, and the Bureau of Labor Statistics) and obligations for statistical programs in an additional 54 bureaus or agencies. In addition to employment and budget obligations, the tables show budget totals for all current and periodic programs and for broad subject matter areas. These tables indicate the level of resources presently available and those proposed in 1978 for statistical programs throughout the Federal Government.

Over the years this analysis has been made more comprehensive and more useful by inclusion of information on additional statistical activities and refinement of the guidelines for determining which Federal programs should be included in the analysis. Because it has become more comprehensive, it is appropriate to provide clarification concerning the character and limitations of the analysis.

Statistical activities include: Planning for statistical programs, project design, questionnaire or form design, instructional materials, training of interviewers, data collection, training of processing personnel, processing, primary analysis, dissemination, and publication; classification; preparation of estimates and projections; statistical manipulation of data collected by others; statistical methodology and research; and management and coordination of statistical operations.

The summary tables concerning Federal statistical programs do not represent a unified budget total that has been allocated among the various programs. Rather this budget is a compilation of the budgets for statistical programs and represents the amounts that were individually derived in relation to the specific needs for each program. Hence, funds removed from the budget of one statistical program during either the executive or the congressional budget review process do not necessarily become available for allocation to another statistical program, even within the same agency. They may be used to help reduce the budget total or to help finance other statistical or non-statistical activities.

Furthermore, this analysis of statistical resources by broad subject area is not intended to represent a statement of priorities among these areas. The tables do, however, reflect a process that attempts to analyze statistical needs within the subject matter areas, to provide funding for the most clearly established needs, and to eliminate or reduce resources for programs where the need is no longer evident. Also, the budget recommendations are coordinated in the sense that,

in selecting projects for inclusion in the budget of one agency, account is taken of related projects in other agencies. In addition, consideration may be given to more than one agency as the appropriate location of project funds and required personnel.

Moreover, as the title "Principal Federal Statistical Programs" suggests, the analysis does not include all Federal statistics. For example, agencies or bureaus with less than \$300 thousand of obligations for statistical programs are not included. In addition, data collection and analysis that relate to internal departmental management are not included unless they have multipurpose or national policy significance. Scientific and research data are also generally excluded except in cases where such data are basic components of the multipurpose data base for a given subject area. For example, the analysis for both energy and environmental statistics includes scientific data in these fields. However, most management, scientific, and research data are not included.

In this context, total obligations for current statistical programs will increase by \$97.9 million or 16.5% over 1977. Periodic programs will increase by \$8.1 million or 12.5% over 1977, primarily because of accelerated planning for and preparation of the 1980 decennial census. Total obligations for all principal Federal statistical programs will increase by \$106.0 million or 16.1% over 1977.

PERSONNEL REQUIREMENTS

The quality, timeliness, and integrity of Federal statistics are the product of the staff engaged in production and analysis of these series. Information on the full-time permanent positions proposed for major statistical agencies is presented in table G-1. In addition to these positions in major statistical agencies, there are many statisticians working in smaller statistical units in other agencies and departments. The figures in table G-1 do not include part-time or temporary positions because the only consistently defined figures that are currently available are those on full-time permanent positions.

Table G-1. FULL-TIME PERMANENT POSITIONS BY AGENCY

	1976 actual	1977 estimate	1978 estimate
Department of Agriculture:			
Statistical Reporting Service.....	1,238	1,289	1,303
Department of Commerce:			
Bureau of Economic Analysis.....	509	540	560
Bureau of the Census.....	4,059	4,084	4,091
Department of Health, Education, and Welfare:			
National Center for Education Statistics.....	191	1 179	1 191
National Center for Health Statistics.....	522	1 542	1 542
Department of Labor:			
Bureau of Labor Statistics.....	1,774	2 2,500	2 2,372
Total for six agencies reporting.....	8,293	9,134	9,059

¹ These estimated figures are subject to further departmental review.

² Over the last several years the Bureau of Labor Statistics has been reporting employees working on programs financed by other agencies as temporary, in the expectation that the programs would remain temporary. However, the programs have proved to be ongoing and the positions occupied fit the definition of permanent since in actuality they are occupied for more than 1 year. The reporting of these employees, therefore, is changed in 1977.

The variations in staff levels relative to the program sizes are partially explained by the different natures of the various agency programs. For example, the Bureau of the Census does a great deal of work for other agencies on a reimbursable basis for which no funds are included in the Census Bureau's budget although the work is performed by Census personnel. The National Center for Education Statistics, on the other hand, has proportionately more work done under contract using the contractor's personnel. The decrease in the personnel level for the Bureau of Labor Statistics is because of the completion of the Consumer Price Index revision program in 1977.

STATISTICAL COORDINATION

Since the budgets for statistical programs are determined by relating the needs for information to the specific program requirements of the statistics-producing agencies, it is essential to have an ongoing mechanism for coordinating the needs of the various users. For example, many Federal programs allocate funding based upon total population or some specific subgroup of the population. An analysis of Federal programs for 1975 revealed that \$33 billion of Federal grants to States and units of local government were affected by formulas that used population as one of the variables. Under the Budget and Accounting Procedures Act of 1950, the Office of Management and Budget (OMB) has broad authority for the coordination of statistical programs and, pursuant to this authority, sets forth statistical standards in OMB Circular A-46. To emphasize the need for coordination in the use of population statistics, OMB recently amended Circular A-46 to require that all agencies use the same population series in the administration of Federal programs.

The wide use of population statistics for Federal policymaking has long been recognized. In fact, the needs of Federal users of these statistics have been coordinated formally since the late 1940's, in conjunction with the 1950 decennial census. This process is continuing. An interagency group—the Federal Agency Council on the 1980 Census, comprised of representatives from more than 90 Federal agencies—was organized in 1974 to advise on the content of the 1980 decennial census. Nine subject matter committees of the Council consider policy data needs and content for the 1980 census. The Council will continue to review tabulation plans, geographic area data requirements, and reliability requirements for the various agencies.

Economic statistics, which are of central importance in Federal policymaking, are the subject of considerable attention now. An intensive review of the basic data requirements for the national income accounts was initiated in 1973, and the findings of the Advisory Committee on Gross National Product (GNP) Data Improvement influenced budget recommendations for 1977 as well as 1978. Following public review of the Committee's work in 1977, additional improvements are likely to be reflected in future budgets.

An extensive review of the entire range of Federal statistics will become the subject of public review in 1977 with the distribution of draft materials for "A Framework for Planning U.S. Federal Statistics, 1978-1989," an overall interagency planning effort, coordinated by OMB. The framework contains a discussion of the organization of

U.S. Federal statistics, including the roles and missions of the major statistical agencies, a discussion of 16 different broad subject areas, and a discussion of a variety of specific crosscutting issues affecting the Federal statistical system, such as confidentiality, professional staff training, reporting burden, interagency (reimbursable) funding, and Federal-State cooperative programs.

Table G-2. OBLIGATIONS FOR PRINCIPAL CURRENT STATISTICAL PROGRAMS, BY BROAD SUBJECT AREA ¹

(In millions of dollars)

	1976 actual	1977 estimate	1978 estimate
Prices and price indexes.....	14.0	20.4	29.7
Labor statistics.....	76.8	81.7	88.5
Production and distribution statistics.....	36.6	39.4	40.1
Agriculture statistics.....	39.4	47.4	49.8
Transportation statistics.....	19.3	25.9	27.4
Housing and construction statistics.....	20.8	22.0	24.4
Economic and business financial accounts.....	38.3	41.7	43.6
Energy statistics.....	65.6	100.6	146.2
Environmental statistics.....	40.7	35.8	43.4
Health statistics.....	94.5	103.4	114.4
Education statistics.....	25.1	15.0	17.5
Income maintenance and welfare statistics.....	24.7	25.8	28.9
Population statistics.....	6.2	6.8	8.2
Criminal justice statistics.....	36.0	27.2	28.9
Total, principal current programs.....	537.9	593.1	691.0

¹ Classifications are based on primary use of statistics.

CURRENT PROGRAMS

PRICES AND PRICE INDEXES

Continuing consumer expenditure survey (\$6.6 million).—The 1978 budget for the Bureau of Labor Statistics (BLS) provides for a continuing survey of consumer expenditures. The survey will: (1) Produce selected data on an annual basis on consumer income and expenditures classified by family size and other demographic and socioeconomic characteristics, (2) permit publication of a subset of the data on a quarterly basis, (3) provide a data base that can be used for the revision of the BLS family budget program, and (4) provide current data for future revisions of the Consumer Price Index.

Industrial price program (\$0.9 million).—An increase is provided for the industrial price program (previously the wholesale price program) for the beginning of a major overhaul of the program that produces the wholesale, industry sector, and stage of processing indexes. The revised program, which will be implemented in incremental steps to cover additional groups of industries over a number of years, will, when completed, provide a complete system of price measures consisting of: (1) Input and output price indexes at the four-digit industry (Standard Industrial Classification (SIC)) level,

(2) detailed commodity and service indexes, and (3) improved stage of processing indexes. The revision program being started in 1978 will result in indexes based on improved statistical techniques and samples. The data collected will be based on specification pricing techniques.

International price program (\$0.3 million).—The expansion of the BLS international price program is being continued in 1978 by adding coverage for an additional 10% of the value of both U.S. exports and imports. This increment will, by 1979, raise the value of the categories covered by the indexes to 65% of U.S. exports and 50% of the value of products imported into the United States.

LABOR STATISTICS

Public sector bargaining agreements (\$0.3 million).—BLS will conduct a program of industrial relations research and data collection to provide for the development of data on public sector bargaining settlements. The data on the amount and nature of changes in wages and related benefits and estimates of overall costs of the settlement package are expected to permit comparison of settlements between the public and private sectors. The public sector program covered by this increment will initially provide information on approximately 300 collective bargaining units with 1,000 or more employees in State and local jurisdictions.

PRODUCTION AND DISTRIBUTION STATISTICS

Inventory statistics (\$0.5 million).—In recent years the Subcommittee on Economic Statistics of the Economic Policy Board has expressed its concern about the adequacy of Federal statistics on business inventories. Two new Census Bureau programs will make significant improvements in the measurement of change in inventories. Design of these surveys has benefited from recommendations of the National Bureau of Economic Research under contract to the Census Bureau. A survey of the largest, most complex companies in manufacturing, retail trade, and wholesale trade will produce inventory data for company divisions. These reports will be combined with data collected from the smaller companies in order to produce an overall report. For manufacturers, another Census Bureau program will: (1) Provide disaggregated inventory totals classified by type of accounting methodology, (2) study the implications of timing and accounting problems, (3) reconcile the monthly and annual figures, and (4) continue research into inventory data collection methods.

Automated minerals availability system (\$0.5 million).—The Bureau of Mines, Department of the Interior, will automate the minerals availability system. This activity will assimilate already collected data from various surveys and other sources into a computer system that will facilitate access to these data for purposes of research and analysis.

Ocean minerals (\$0.3 million).—The Bureau of Mines will conduct studies related to ocean mining of minerals. Studies will include the minerals potential from ocean mining, the capital and operating

costs of ocean mining, the influence that possible Law of the Sea provisions will have on ocean mineral development, and the possible impact ocean mining could have on land-based mining industries.

Critical minerals (\$0.3 million).—Additional funds allow expansion of the Bureau of Mines program that provides assessments of domestic and foreign resources of “critical” minerals that now are primarily imported.

AGRICULTURE STATISTICS

Agricultural statistics are shown as a separate category this year for the first time. In previous years the bulk of such activities were included in the production and distribution category (\$40.7 million in 1977). Programs dealing with agricultural prices were included under price statistics (\$4.7 million in 1977), and other programs were classified in the labor statistics, economic and business financial accounts, and population statistics categories. Almost all these statistical programs are conducted by the Department of Agriculture (USDA). The censuses of agriculture are not included in this category because they are shown separately as periodic programs. These statistical programs are now reported in one place to coincide with the subject matter contained in the agricultural statistics chapter of “A Framework for Planning U.S. Federal Statistics, 1978-1989” referred to above.

Statistics on rural credit (\$0.3 million).—One of USDA’s responsibilities involves the design and implementation of Federal credit programs affecting rural areas. Capital investment is needed in increasing amounts for sophisticated equipment, increased irrigation, better environmental protection measures, development of nonfarm activities in rural areas, and housing. The Economic Research Service in USDA will undertake a study of the adequacy of capital in rural areas, access to national and regional capital markets, and practices of lending institutions to help evaluate the adequacy and effectiveness of ongoing USDA credit activities.

Prices received by farmers (\$0.5 million).—The Statistical Reporting Service (SRS), USDA, will improve the statistics on prices received by farmers by instituting a nationwide point-of-sale survey. This survey will provide SRS with information needed to select an efficient sample of outlets from which to collect data on the prices farmers received for their agricultural products and will also permit accurate weighting of sample survey responses to estimate aggregate totals.

TRANSPORTATION STATISTICS

Transportation statistics are also shown as a separate category this year. In previous years the activities were included in the production and distribution category (\$25.9 million in 1977). These programs are largely conducted by the Department of Transportation but also include statistical activities of the Army Corps of Engineers, the Civil Aeronautics Board, and the Interstate Commerce Commission. Excluded, however, are the transportation surveys conducted by the

Bureau of the Census as a part of the economic censuses, which are included under periodic programs. Transportation statistics are being reported separately to coincide with the subject matter contained in the transportation statistics chapter of "A Framework for Planning U.S. Federal Statistics, 1978-1989."

HOUSING AND CONSTRUCTION STATISTICS

Housing market statistics (\$2.2 million).—The largest part of this increase will be used for the Annual Housing Survey to provide for increased costs of personal interviewing, to improve control over new additions to the inventory, and to test improvements to the questionnaire (\$1.3 million). The remaining increase will be allocated to the surveys of mortgage lenders, absorption of new rental units, sales and completions of new homes, and mobile home placement.

Community planning and development statistics (\$0.7 million).—The increase in this program will provide for improved monitoring and evaluation of the Department of Housing and Urban Development block grant program and testing of alternative approaches to the allocation of block grant funds.

Surveys of residential alterations and repairs (−\$0.4 million).—The Census Bureau's survey of residential alterations and repairs will be converted from a quarterly to an annual basis. This survey, which provides estimates of expenditures for alterations and additions to existing houses, is used primarily for GNP estimates, and the magnitude of change in this component is such that quarterly measurement is of marginal value.

ECONOMIC AND BUSINESS FINANCIAL ACCOUNTS

Quarterly survey of State and local government finances (\$0.2 million).—Until now the financial information collected from State and local governments, except for data on tax revenues, has been collected on an annual basis. The 1978 budget provides an increase for the Bureau of the Census to survey a sample of State and local governments concerning finance and employment on a quarterly basis. This action will improve the national economic accounts and provide more timely information on the financial conditions of individual governments. These data will be used to develop national estimates of inter-governmental transfer payments and purchases of goods and services for each of several functions of government such as education, highway construction, and welfare, and to secure data on government revenues from user charges, interest earnings, tuition fees, and similar nontax sources.

Commodity classification (\$0.3 million).—The Census Bureau will implement a commodity classification structured to improve the comparability in statistics of imports, exports, and domestic production as required by the Trade Act of 1974. This program will improve the Government's ability to evaluate both the country's international trade position and the effect of international trade on domestic product markets and on employment.

Foreign trade data (—\$0.2 million).—The Census Bureau will discontinue the bilateral reconciliation of statistics on U.S. foreign trade with Canada. This program, which has been conducted in recent years, has accomplished most of its goals.

Balance of payments statistics (\$0.1 million).—In 1978, the Bureau of Economic Analysis (BEA) will begin work required to publish an up-to-date methodology manual describing how the balance of payments accounts are constructed. This manual will be published in 1979 and an historical data supplement will be published in 1981. It has been nearly 25 years since the last manual was published describing how the balance of payments accounts are constructed and more than 13 years since a comprehensive statistical supplement containing comparable historical balance of payments statistics has been published.

ENERGY STATISTICS

The statistical programs of the Energy Research and Development Administration (ERDA) and the Geological Survey are shown for the first time this year in the special analysis. As a consequence the funding levels for energy statistics are substantially higher than those which have been shown in previous special analyses.

Energy resource assessments (\$26.2 million).—Major increases are requested for uranium, geothermal, solar and environmental resources assessments by ERDA. The increases reflect project phasing of the individual assessments.

Improvements in energy consumption data (\$0.9 million).—There is a need for improved energy consumption data. This budget includes supplementary funding (\$0.6 million) in 1977 and a further increase of \$0.3 million in 1978 that will enable the Federal Energy Administration (FEA) to improve further its efforts to measure residential, commercial, and industrial consumption of energy and to assess the impacts of various policy or legislative proposals on energy consuming sectors of the economy.

Energy modeling and forecasting (\$1.7 million).—Because of the close relationship of energy forecasting to formulation of energy policy, high priority has been attached to improving the quality of energy forecasts over various time periods extending to the year 2000. An increase of \$1.8 million over current 1977 appropriation levels is requested to enable FEA to work toward development of a single model producing domestic energy supply and demand forecasts. Funds are eliminated for Bureau of Mines energy model development (—\$0.1 million) since this duplicates work already being done by FEA.

Energy data validation (\$0.9 million).—Data validation, including review of computational procedures and checks on respondent accuracy, is an essential component of a well balanced statistical program. Supplemental funding in 1977 and an additional \$0.9 million in 1978 are provided to enable FEA to mount a program with the objective of validating major energy data systems.

Oil and gas reserves study (\$2.1 million).—FEA will conduct an overall survey of U.S. reserves of oil and natural gas. This program is being developed by an *ad hoc* interagency planning group chaired by OMB, which has received additional comments from industry and other experts. The data, which will be collected and audited on a sample basis for accuracy, will be designed to serve the analytical needs of several agencies, Congress, and the public. In the past, the Government has relied primarily on estimates published by the American Petroleum Institute and the American Gas Association.

Comprehensive review of energy data.—In October 1976 FEA initiated a joint interagency project to conduct a detailed review of all energy information-gathering activities of Federal agencies. The review will be completed by June 1978 and will have each agency report detailed information on each of its energy data systems covering purpose, operating costs, number of respondents, measurement and validation techniques, and other technical items.

ENVIRONMENTAL STATISTICS

Pollution abatement and control expenditures (\$0.3 million).—The 1978 budget for BEA's environmental studies program provides for an expansion of estimates of pollution abatement and control expenditures by: (1) Providing regional and industry detail for those expenditures, (2) developing constant-dollar estimates at the national level, and (3) estimating the physical units of pollutants emitted per dollar of output for each of the major polluting industries at the national level and relating those data to the pollution abatement expenditures by those industries. These data will improve the basis for understanding the regional and industry environmental implications of different economic growth goals.

Environmental planning (\$1.0 million).—As a complement to energy models of ERDA, an increase is requested for development of environmental data and planning methods. The increase reflects a buildup of this activity to a proposed operational level.

Health effects of air pollution (\$4.6 million).—An increase in the statistical program of the Environmental Protection Agency (EPA) is to be directed toward the conduct of studies of air carcinogens that will permit an assessment of the contribution of environmental agents to the cancer incidence and mortality of the general population. The utilization of a multisite epidemiologic program on sulfate and sulfuric acid exposure will also be initiated. Analyses of data collected through the community health air monitoring program will assist in the quantification of short-term exposure levels to various air pollutants.

Central statistical unit in EPA.—In 1978 EPA will establish a central statistical unit with responsibility for the development and coordination of the agency's statistical policies. The unit will review and insure the quality of project design and data development throughout EPA and will facilitate interagency communication about statistical activities.

HEALTH STATISTICS

The 1978 funding level of \$33.6 million for the National Center for Health Statistics (NCHS) represents a \$6.0 million increase from the 1977 level. This increase is provided for expansion of the Center's Federal-State-local cooperative health statistics system (CHSS). During 1978, CHSS will expand its activities into all 50 States, with particular emphasis on vital statistics, health manpower, and health facilities statistics. NCHS will maintain its existing program, and will continue its expanded role as the focal point for Federal health statistics, reflected by the increased number of statistical activities it performs on a reimbursable basis for other Federal agencies in 1977 and 1978.

Other changes in health statistics activities outside of NCHS are limited to areas in which Federal programs or responsibilities have been expanding:

Medical care expenditures (\$1.4 million).—The Health Resources Administration's National Center for Health Services Research will use these funds to complete the nationwide panel study of medical care expenditures begun in 1976.

Health manpower statistics (—\$0.7 million).—The funding for the Bureau of Health Manpower's statistical activities will decrease by \$1.2 million in 1977 and by \$0.7 million in 1978. In effect, all health manpower statistical activities in 1978 will be conducted by NCHS within its ongoing program.

Biomedical research statistics (\$0.8 million).—A \$0.5 million increase will be used for collection of data on the etiology of cancer in man. A \$0.3 million increase will be provided for the initiation of an epidemiology program within the National Institute of Environmental Health Sciences.

Drug abuse statistics (\$0.5 million).—The Drug Enforcement Administration (DEA) in the Department of Justice will receive an increase of \$0.3 million in 1978 for the drug abuse warning network (DAWN) project, which is cofunded by the National Institute on Drug Abuse (NIDA) in the Department of Health, Education, and Welfare. The additional funds are DEA's share of a program to make the DAWN system a better source of national indicators of drug abuse. As a followup to NIDA's ongoing drug abuse treatment data systems, NIDA will receive an increase of \$0.2 million in 1978 to continue the assessment of drug abuse treatment effectiveness started in 1977.

Occupational health surveillance (\$0.5 million).—The 1978 budget provides funds for the Department of Health, Education, and Welfare's National Institute for Occupational Safety and Health to conduct periodic medical examinations of coal miners, collect epidemiological data by location of underground mine, and carry out statistical analyses including correlation of medical findings with data from the Bureau of Mines, Department of the Interior.

Health insurance related statistics (\$2.2 million).—The Social Security Administration will continue to develop and maintain a standardized statistical reporting system for the medicare program, expand its health insurance research program, continue evaluation of the medicare program, and improve the current medicare survey.

Disability data (\$1.2 million).—This increase will allow the Social Security Administration to reinterview a large sample of the disabled population to determine the effects of the new supplemental security income program on this population.

Veterans Administration patient data (\$0.3 million).—Additional funds are provided to maintain the Veterans Administration's patient-oriented discharge data system, which includes all episodes in Veterans Administration-sponsored hospitals, nursing homes or domiciliary care facilities.

EDUCATION STATISTICS

The 1978 budget for the National Center for Education Statistics (NCES) is \$15.9 million. This represents an increase of \$3.0 million over the 1977 level for the base program and a decrease of \$0.2 million for studies mandated by law. The decrease is due to a shift from the developmental to the operational phases for three major mandated studies. NCES will concentrate on improving statistical services by stimulating increased data comparability, completing further analyses of existing data bases, and coordinating and disseminating more widely information for users.

Assistance to States (\$0.8 million).—NCES will assist States in their efforts to build compatible statistical systems and to use standard definitions for reporting by developing reporting manuals and conducting training sessions. A personnel exchange, jointly supported by NCES and the States, will allow the States to capitalize on expertise in counterpart agencies.

Analysis (\$1.0 million).—NCES will analyze existing data bases from the survey of income and education, the national longitudinal study, the current population survey, and the national assessment of educational progress to examine the interrelationships among low-income, bilingual and handicapped students; the impact of vocational training on job experiences; utilization of Federal aid in 4- and 5-year degree programs; and the relationships between background variables and individuals' achievements.

Dissemination (\$0.8 million).—The NCES dissemination system will be restructured to permit NCES to respond more directly to the need for timeliness of data. The new strategy will accelerate the availability of the data in forms requested by users by providing preliminary and updated data tapes, microfiche, and special tabulations. Concentration of staff effort will be shifted toward analytic monographs and other forms of presentation highlighting data useful to policymakers.

Collection (\$0.4 million).—The program of data collection for 1978 includes some reductions in scope of effort as well as new initiatives. There will be a shift in emphasis from data describing educational institutions to data describing student characteristics, backgrounds, and outcomes. This emphasis relates to concerns about the match between student needs and educational services, acceptable standards of student performance, and the transition of persons from programs of formal education to work.

INCOME MAINTENANCE AND WELFARE STATISTICS

Increases for income maintenance statistics reflect continuation of efforts to improve the data available for analysis of the costs of income maintenance programs and impact on beneficiaries.

Survey of income and program participation (\$2.2 million).—1978 will be the second year of a planned 4-year developmental effort coordinated by the Office of the Assistant Secretary for Planning and Evaluation in the Department of Health, Education, and Welfare. This increase will provide for: Testing of alternative approaches to obtaining through household interviews information on in-kind benefits and assets; exploring ways to approximate the eligibility requirements for Federal programs; developing jointly with BLS a short battery of consumer expenditure questions; and field testing of alternative design features for multiple frame sampling.

Welfare statistics (\$0.6 million).—General statistical support will be increased as efforts continue to improve the timeliness of reports while reducing the reporting burden on the States (\$0.4 million). A refocusing of the statistical activities of the Social and Rehabilitation Service (SRS) is anticipated in 1978, with the aid of a study to be completed in 1977 of the functions of the National Center for Social Statistics. Further strengthening of the quality control program to reduce payment errors in the program of aid to families with dependent children is planned during 1978 (\$0.3 million). Implementation on a State-by-State basis of a prototype system for the collection of data on all recipients of benefits under SRS programs will reduce the reporting burden on welfare recipients and agencies while providing rapid access to data on recipient characteristics.

Social security statistics (\$0.3 million).—Analysis of beneficiary roles will be continued and expanded through the preparation of special reports on the relationships between race, economic status and social security benefits, and analysis of private and public retirement payments in relation to social security benefits (\$0.6 million). A modest expansion in actuarial statistics will support the preparation of alternative proposals for coping with the projected depletion of the trust fund by 1979 (\$0.2 million). Increases in outlays will be partially offset by a reduction for the retirement history study during 1978, upon completion of field work for the fifth phase data collection (−\$0.5 million).

POPULATION STATISTICS

Methods test panel (\$0.5 million).—The 1978 budget provides an increase for the Census Bureau to establish a methods test panel to investigate and develop new approaches and concepts in household surveys to obtain demographic and labor force statistics. The panel will be used to test procedural changes recommended by the National Commission on Employment and Unemployment Statistics.

CRIMINAL JUSTICE STATISTICS

The criminal justice statistics program of the National Criminal Justice Information and Statistics Service in the Law Enforcement Assistance Administration, although showing a decrease in funding in 1977 and an increase in 1978, will be essentially unaffected because of multiyear funding.

PERIODIC PROGRAMS

1977 Census of Governments.—There are four major parts of the census of governments: Governmental organization, governmental finance, public employment, and taxable property values. Most data are collected by mail from more than 78,000 units of State and local government, but field enumeration is used to gather part of the data on taxable property values. Funds requested for this program in 1978 show a decrease because the data collection and processing for the survey of taxable property values will be largely completed in 1977.

1977 economic censuses.—Funds provided in 1978 for the censuses of business, manufactures, mineral industries, and transportation will permit the Census Bureau to complete the preparation and mailing of the report forms, to begin the review of collected data, to gather and process administrative records for small firms in lieu of direct data collection, and to expand the coverage of service industries. Published results from the national travel and the truck inventory and use segments of the transportation census will also be permitted with these funds.

1978 Census of Agriculture.—In 1978 the Census Bureau will continue its planning for this census, including consulting with data users on the content of the questionnaire, exploring the possible use of sampling techniques, and planning for specialized follow-on surveys (for instance, on horticulture and farm finances) that have been conducted in connection with past censuses. The largest share of 1978 funding is for the collection and processing of the basic census information. This and the next census will be taken after a shorter interval (4 years after the preceding one), so that by 1982 the census of agriculture will refer to the same year as the economic censuses. This change in reference date will facilitate closer coordination of benchmark economic data.

1980 Census of Population and Housing.—In 1978 the Bureau of the Census will continue planning for the 1980 decennial census. The year

will be a critical one in that the content of the census will be conclusively decided as will be the various procedures involved for an enumeration of the entire Nation. In April 1978 a "dress rehearsal" will provide a final test of the procedures. During the year extensive geographic work will involve the identification and coding of boundary changes. Other activity will include completion of master address registers, preparation for timely release of data for Congressional reapportionment, and continued close communication with hard-to-enumerate minority groups. Work will also proceed on the census evaluation program and the completion of quality control techniques.

In addition to preparation for the massive data collection associated with the April 1980 census enumeration, the Bureau of the Census will begin planning for follow-on and adjunct surveys which will provide detailed information for samples of the population and the housing inventory. One or more follow-on studies will use information obtained from the 1980 census questionnaires for defining particular universes for which additional, more detailed information will be collected shortly thereafter. One or more adjunct studies, on the other hand, will be conducted after 1980 to gather more detailed information on samples of the entire population. The topics to be covered in the follow-on and adjunct surveys will be determined in consultation with other Federal agencies and may include topics such as residential finance, disability, and characteristics of the occupants of mobile homes.

The planning effort for follow-on surveys will also provide an opportunity for the Bureau of the Census to begin to examine the technology and logistics of "nested" surveys in preparation for the recently authorized mid-decade census program. "Nested" surveys cover different subject matter areas of concern, in addition to a core set of questions, in different but equivalent subsamples of the same universe. The data from these various surveys can be consolidated at the processing stage to obtain a more complete set of statistical measures. Support for these activities is included in the general funding for the 1980 census.

Registration and voting surveys.—Work on the November 1976 survey will be completed in 1977. Legislation is being proposed to provide for conducting this survey on a quadrennial rather than a biennial basis. The next survey would be in 1980.

Revision of the Consumer Price Index.—The decrease in this Bureau of Labor Statistics program reflects the completion of the revision of the Consumer Price Index during 1977.

Table G-3. OBLIGATIONS FOR PRINCIPAL STATISTICAL PROGRAMS, BY AGENCY (in millions of dollars)

	1976 actual	TQ actual	1977 estimate	1978 estimate
CURRENT PROGRAMS				
Department of Agriculture:				
Agricultural Research Service	0.3	2.1	4.1	4.1
Economic Research Service	7.2	1.8	7.2	7.3
Office of the General Sales Manager	0.5	0.1	0.5	0.5
Statistical Reporting Service ¹	31.2	8.2	35.3	37.5
Department of Commerce:				
Bureau of Economic Analysis ¹	11.7	3.1	12.8	13.9
Bureau of the Census ¹	41.0	11.3	44.9	46.1
Domestic and International Business Administration	3.3	0.6	2.8	2.0
Economic Development Administration	1.0	0.1	0.3	0.4
National Bureau of Fire Prevention	0.8	0.2	1.2	1.7
National Oceanic and Atmospheric Administration	2.6	0.7	4.0	4.0
Department of Defense:				
Corps of Engineers	1.8	0.4	2.0	2.2
Department of Health, Education, and Welfare:				
Alcohol, Drug Abuse, and Mental Health Administration	6.8	1.3	7.8	8.1
Center for Disease Control	2.5	0.5	3.2	3.7
Food and Drug Administration	1.6	0.3	1.7	1.8
Health Resources Administration:				
National Center for Health Statistics	25.0	7.4	27.6	² 33.6
Other Health Resources Administration	7.0	0.3	1.0	1.7
Health Services Administration	2.4	1.7	3.3	3.3
National Center for Education Statistics	10.5	4.7	13.1	15.9
National Institutes of Health	23.4	5.3	29.4	30.3
Office of the Assistant Secretary for Human Development	4.9	1.0	4.6	3.2
Office of Assistant Secretary for Planning and Evaluation	5.9	1.1	3.7	5.6
Office of Education	14.6	7.8	1.8	1.5
Social and Rehabilitation Service	6.3	1.6	7.6	8.2
Social Security Administration	22.2	13.5	28.8	32.7
Department of Housing and Urban Development:				
Community Planning and Development	1.0	0.2	1.6	2.3
Housing	2.6	0.6	2.2	1.9
Policy Development and Research	9.7	2.6	9.3	11.5
Department of the Interior:				
Bureau of Mines	13.0	3.4	13.7	14.8
Fish and Wildlife Service	6.7	1.4	7.0	6.9
Geological Survey	3.5	1.0	4.3	4.3
Mining Enforcement and Safety Administration	1.7	0.4	1.6	1.6
Department of Justice:				
Drug Enforcement Administration	1.1	0.1	1.1	1.4
Federal Bureau of Investigation	1.7	0.4	2.1	2.2
Law Enforcement Assistance Administration	34.0	11.3	24.8	26.4
Department of Labor:				
Bureau of Labor Statistics ¹	54.2	16.2	68.0	82.9
Employment and Training Administration	26.3	5.5	23.0	24.2
Employment Standards Administration	0.5	0.1	0.5	0.5
Occupational Safety and Health Administration	5.4	1.5	6.2	6.2
Department of Transportation:				
Office of the Secretary	3.1	0.7	1.3	1.4
Federal Highway Administration	3.3	1.9	4.9	5.1
Federal Railroad Administration	1.0	0.2	1.3	0.8
National Highway Traffic Safety Administration	6.8	2.4	11.9	13.3
Urban Mass Transportation Administration	0.1	0.3	0.9	0.8

See footnotes at end of table.

Table G-3. OBLIGATIONS FOR PRINCIPAL STATISTICAL PROGRAMS, BY AGENCY (in millions of dollars)—Continued

	1976 actual	TQ actual	1977 estimate	1978 estimate
CURRENT PROGRAMS—Continued				
Department of the Treasury:				
Office of the Secretary.....	0.1	-----	0.2	0.1
Customs Service.....	3.3	0.9	3.5	3.5
Internal Revenue Service.....	12.7	3.1	13.0	13.6
Civil Aeronautics Board.....	2.2	0.6	2.4	2.5
Consumer Product Safety Commission.....	2.3	0.8	2.8	2.8
Energy Research and Development Administration.....	26.3	8.5	52.4	89.8
Environmental Protection Agency.....	33.1	12.7	26.9	32.8
Federal Energy Administration.....	22.5	6.5	28.4	38.9
Federal Home Loan Bank Board.....	2.6	0.7	3.1	3.2
Federal Power Commission.....	9.4	2.9	12.2	11.5
Federal Trade Commission.....	1.1	0.4	1.6	1.8
Interstate Commerce Commission.....	1.1	0.3	1.2	1.2
National Science Foundation.....	2.1	0.6	2.3	2.3
Securities and Exchange Commission.....	0.7	0.2	0.8	0.8
Veterans Administration.....	8.2	1.9	7.9	8.4
Total, current programs.....	537.9	165.4	593.1	691.0
PERIODIC PROGRAMS				
Department of Commerce: Bureau of the Census:				
1972 economic censuses.....	0.8	0.1	0.1	-----
1977 economic censuses.....	2.1	0.9	7.8	16.0
1977 Census of Governments.....	0.4	0.2	3.8	1.0
1974 Census of Agriculture.....	7.9	1.8	3.3	-----
1978 Census of Agriculture.....	-----	0.1	3.9	8.7
1970 Census of Population and Housing.....	0.2	-----	-----	-----
1980 Census of Population and Housing.....	4.6	2.1	17.6	30.6
Intercensal demographic estimates.....	7.0	0.4	2.0	1.9
Registration and voting surveys.....	0.1	0.4	4.3	-----
Periodic programs geographic support.....	2.3	0.5	3.2	3.0
Data processing equipment ³	2.7	0.6	7.2	7.9
General administration and other ⁴	2.9	1.2	4.2	2.2
Department of Labor: Bureau of Labor Statistics:				
Revision of Consumer Price Index.....	6.9	1.8	5.8	-----
Standard industrial classification revision program.....	0.4	1.2	1.5	1.5
Total, periodic programs.....	38.3	11.3	64.7	72.8
Total, principal statistical programs.....	576.2	176.7	657.8	763.8

¹ Includes entire budget for this agency.

² Includes both direct program funds and "Salaries and expenses," Assistant Secretary for Health.

³ Includes capital outlays for large-scale data processing equipment acquisitions.

⁴ Includes depreciation, other capital outlays, and changes in selected resources.

Table F-6. CREDIT ADVANCED AND RAISED BY FEDERALLY SPONSORED CREDIT INTERMEDIARIES—Continued

(In millions of dollars)

	Net change			Outstanding		
	1977 actual	1978 estimate	1979 estimate	1977 actual	1978 estimate	1979 estimate
BORROWING (Funds raised)						
Student Loan Marketing Association.....	105	95	130	510	605	735
Federal National Mortgage Association ¹	807	2,095	372	31,492	33,587	33,959
Farm Credit System:						
Banks for cooperatives.....	864	726	583	4,979	5,705	6,288
Federal intermediate credit banks.....	1,589	1,825	2,082	12,656	14,480	16,562
Federal land banks.....	2,682	2,562	2,961	19,535	22,097	25,058
Federal Home Loan Bank System:						
Federal home loan banks.....	-1,409	4,534	3,464	17,159	21,693	25,157
Federal Home Loan Mortgage Corporation:						
Corporation accounts.....	-1,769	905	-47	3,281	4,185	4,138
Participation certificates ²	2,814	4,066	4,323	5,339	9,406	13,729
Total borrowing (unadjusted).....	5,683	16,807	13,868	94,951	111,759	125,627
Less: Borrowing from other sponsored agencies:						
FHLB loans to FHLMC.....	-1,517	-474	-100	2,364	1,890	1,790
Other.....	152	60	133	305	365	399
Less: Borrowing from Federal agencies:						
FFB loans to SLMA.....	105	95	130	510	605	735
FHLBB loan to FHL banks.....	-1,491	-----	-----	1,491	-----	-----
Less: Loans to Federal agencies:						
Investments in Federal securities.....	-2,919	184	103	748	931	1,034
Total borrowing (adjusted).....	11,353	16,942	13,702	91,025	107,967	121,669

¹ Loans purchased at discount are recorded at acquisition cost.² Participation certificates sold against mortgage pools are counted as sales of loan assets and are therefore not reflected on the Corporation's balance sheet.

FUNCTIONAL AREAS SUPPORTED BY FEDERAL CREDIT ASSISTANCE

The functional distribution of direct loans and federally guaranteed loans discussed in previous years in this analysis is now displayed more comprehensively in Part 5 of the main budget document. It is accordingly now omitted from the special analysis.

**SUMMARY OF FEDERAL AND FEDERALLY ASSISTED CREDIT
TRANSACTIONS**

Table F-7 summarizes the major components of Federal financial activity. Components within the aggregates vary widely from year to year for many reasons. Recent FFB purchases of large amounts of guaranteed loans returned them to off-budget direct loans; and recent legislation has shifted the Export-Import Bank from off-budget to on-budget status in 1977. FFB lending has similar effects on borrowing reducing the volume of guaranteed borrowing while increasing the volume of Federal borrowing from the public. In addition, Federal borrowing from the public varies from year to year largely reflecting the changing size of the unified budget deficit.

Table F-7. SUMMARY OF CREDIT ADVANCED AND CREDIT RAISED UNDER FEDERAL AUSPICES (in billions of dollars)

	Net change			Outstanding		
	1977 actual	1978 estimate	1979 estimate	1977 actual	1978 estimate	1979 estimate
LENDING (Credit advanced)						
Direct loans (from table E-2):						
On-budget agencies.....	2.6	7.9	4.3	68.2	76.1	80.4
Off-budget agencies.....	9.0	11.1	13.0	32.7	43.8	56.8
Guaranteed loans (primary, adjusted, from table E-5).....	14.1	16.5	23.2	183.9	200.4	223.6
Loans by federally sponsored credit intermediaries (from E-6).....	11.0	16.3	14.8	98.9	115.2	130.1
Total, credit advanced to the public under Federal auspices ¹	36.6	51.8	55.4	383.7	435.5	490.9
Outside the budget	34.1	43.8	51.1	315.6	359.4	410.5
BORROWING (Credit raised)						
Federal borrowing from the public (from table C-1).....	53.5	66.0	73.0	551.8	617.8	690.8
Guaranteed borrowing (same as guaranteed loans, above).....	14.1	16.5	23.2	183.9	200.4	223.6
Borrowing by federally sponsored credit intermediaries (net, from table E-6).....	11.4	16.9	13.7	91.0	108.0	121.7
Total, credit raised from the public under Federal auspices ¹	78.9	99.4	109.9	826.8	926.2	1,036.1
Net credit advanced	-42.3	-47.6	-54.5			

¹ Excludes Federal Reserve credit.

INTEREST SUBSIDIES

Most frequently, the favorable terms of Federal credit programs take the form of an interest rate that is lower than the rate charged by private lenders, although the maturity of the loan and the loan-to-value ratio are also more favorable. Other credit subsidies may result from fees or premiums inadequate to cover costs of administration and losses on credit guarantees and insurance programs, waivers of such fees or premiums, or forgiveness of part or all of the loan principal.

Although intended to be illustrative rather than definitive measurements, previous attempts to estimate subsidy values in this analysis have been questioned on a number of counts. While there has been general acceptance and increasing use of the present value method of valuation (as recommended by the 1967 President's Commission on Budget Concepts), there are significant differences of view on the selection of interest rate standards for both subsidy measurement and for capitalization. Also, past treatment has not included the interest subsidies provided through tax-exempt interest—a subsidy item that is substantially larger than all other credit subsidies combined. Accordingly, further publication of the detailed interest subsidy table in this analysis is being deferred pending broader analysis and resolution of these issues.

SPECIAL ANALYSIS G

TAX EXPENDITURES

The Congressional Budget Act of 1974 requires a listing of tax expenditures in the budget. Tax expenditures are defined by that act as "revenue losses attributable to provisions of the Federal tax laws which allow a special exclusion, exemption, or deduction from gross income or which provide a special credit, a preferential rate of tax, or a deferral of tax liability." Tax expenditures are one means by which the Federal Government pursues public policy objectives and, in most cases, can be viewed as alternatives to budget outlays, credit assistance, or other policy instruments.

Tax expenditures have varied objectives. Nearly all tax expenditures are meant either to encourage certain economic activities or to reduce income tax liabilities for taxpayers in special circumstances. Among the economic activities encouraged by tax expenditures are investment, housing, petroleum exploration and development, borrowing by State and local governments, and support of charitable institutions. The deductibility of medical expenses, casualty losses, and personal exemptions for the aged and blind are examples of adjustments of tax liabilities to meet special circumstances.

The benefits of tax expenditures designed to encourage certain types of economic activity typically do not rest fully or even mostly with the corporations or individuals whose taxes are initially affected. An initial reduction in taxes tends to attract more resources to the preferred activity, thereby competing away some or all of the shortrun advantage conferred to particular taxpayers by the tax expenditures. Thus benefits often accrue to others in the form of lower prices for particular goods or services, or in other ways become widely diffused. For example, the deductibility of charitable contributions does not merely lower individual or corporate liabilities; the institutions that receive the contributions also benefit as do the beneficiaries of those institutions.

This special analysis provides measures of the quantitative importance of various tax expenditures but does not attempt to evaluate their effectiveness. It should be emphasized that the listing of specific tax expenditure items does not imply either approval or disapproval of specific provisions of the tax system.

Major changes in tax expenditures resulting from the Tax Reduction and Simplification Act of 1977 are noted in the text. The analysis concludes with a discussion of changes in tax expenditures resulting from the tax proposals that are part of the 1979 budget. Some changes in tax expenditures are proposed as a part of the President's tax reform program specifically to improve the efficiency and equity of the tax system and to simplify it.

DEFINING TAX EXPENDITURES

Income tax provisions resulting in tax expenditures are further defined in the legislative history of the Congressional Budget Act as exceptions to the "normal structure" of the individual and corporation income taxes. They reduce tax liabilities for particular groups of taxpayers. Excluded from further discussion in this analysis are negative tax expenditures or tax penalties; that is, exceptions to the normal structure of income taxes that result in increased tax liabilities for certain groups of taxpayers. There are only a few such exceptions; one example is the nondeductibility of gambling losses in excess of gambling gains where gambling is engaged in for profit; another is limitations on the deductibility of capital losses. Two were added by the Tax Reform Act of 1976: deductibility of the costs associated with the demolition of certain historic buildings was disallowed; and certain normal tax treatment was denied for taxpayers who cooperate with or participate in an international boycott.

The "normal structure" is not defined in the tax code. The concept has evolved from various congressional and public reviews of the U.S. tax system focusing on the definition of the income tax base and the rates applied to that base. Conceptually, it would be more appealing to begin with a theoretically pure income tax base and use for this purpose "economic income," defined as receipts available to support consumption or additions to net wealth, the imputed value of in-kind consumption, and imputed changes in net wealth. Some tax expenditures, such as those resulting from exclusions of certain types of income or special deductions, could then be identified as the result of departures from a theoretically pure tax base. However, this is not possible. The concept of the normal structure recognizes that it is impractical to make the necessary imputations. Furthermore, the normal structure includes the separate taxation of individual and corporate incomes whereas a theoretically pure income tax structure would integrate these two taxes. Theoretically pure tax bases could also be specified for other types of taxes, such as a tax on consumption spending rather than on economic income.

Although a theoretically pure income tax base can be specified, there is no theoretical foundation upon which to support any particular degree of progressivity in the individual income tax rate structure or any particular corporate income tax rate. For purposes of identifying tax expenditures, such as those resulting from special tax rates or tax credits, the structure of progressive rates and provisions that exclude low-income persons from tax liability embodied in current law are deemed a part of the normal tax structure.

When the rate structure and threshold levels for tax liability are changed, for whatever reason, the new rates and threshold levels become part of the normal structure used in the analysis of tax expenditures. The Tax Reduction and Simplification Act of 1977 increased the standard deduction (now known as the "zero bracket amount") and eliminated the distinction between the low-income allowance (minimum standard deduction) and the percentage standard deduction, thus altering the normal tax structure. Those alterations reduced the estimated revenue losses associated with many tax expenditure items primarily because fewer taxpayers will itemize their deductions. The President's proposal to replace the deduction

for personal exemptions and the general tax credit with a credit and to reduce tax rates will have a similar impact on tax expenditures.

The existing rate structure for individuals, ranging from 14% to 70%, and the 48% corporate tax rate cannot be presumed to exist independently from current tax expenditures. If major tax expenditure items were deleted and budget outlays remained constant, tax rates would undoubtedly be set at lower levels so as to maintain an appropriate fiscal policy. For example, the reductions in tax rates proposed by the President are related to proposed reductions in tax expenditures.

Some of the more technical issues and ambiguities involved in distinguishing between the normal structure of the income tax system and tax expenditure provisions are discussed in the following paragraphs. In a few cases the conceptual ambiguities require that essentially arbitrary distinctions be made.

- *Threshold levels for tax liability.*—Tax code provisions that determine threshold levels of income below which no tax liability is imposed for the different types and sizes of taxpaying units are part of the normal structure. Personal exemptions and the low-income allowance have determined these thresholds in recent years. Legislation enacted during 1975, 1976, and 1977 temporarily added the general tax credit to these provisions. The Tax Reduction and Simplification Act of 1977 made a permanent change in the provisions that establish threshold levels for tax liability by repealing the low-income allowance and the percentage standard deduction and substituting flat standard deductions (zero bracket amounts) for different types of filing units. However, deductions or credits for additional personal exemptions for taxpayers over 65 and for the blind do result in tax expenditures because they depend upon more special circumstances. The percentage standard deduction, to the extent it exceeded the low-income allowance, also resulted in a tax expenditure because it substituted for itemized deductions that are mostly tax expenditure items.
- *The progressive rate schedules for the individual income tax.*—No tax expenditure results because some income is taxed at lower rates than other income when progressive rate schedules are applied to all taxable income. The income averaging provision of the code is a part of the normal structure since it limits the impact of progressive rates when income increases significantly. The maximum tax of 50% on personal service income is treated as a tax expenditure item because it fits the definitional term “preferential rate of tax.”
- *Separate rate schedules for single and married taxpayers, married taxpayers filing separately, and heads of households.*—Existing provisions regarding the definition of taxpaying units and separate rate schedules for different types of taxpayers are accepted as part of the normal tax structure.
- *Imputed income from owner-occupied housing and other sources.*—A theoretically pure income tax would include in its base an imputation for the income received in kind from the occupancy of a home owned by the taxpayer and imputations for in-kind income from the ownership of other durable assets. Because such imputations are difficult to make and are contrary to usual concepts of

income, they are not considered in the computation of tax expenditures even though such exclusions of imputed income affect the allocation of the economy's resources, particularly by stimulating owner-occupied housing. If income on owner-occupied housing were imputed, deductions for mortgage interest and property taxes would be an appropriate part of the normal structure in order to measure the amount of net income that should be included in the tax base. Without the imputation, those two deductions result in tax expenditures.

- *The value of Government benefits received in kind.*—The exclusion from gross income of direct cash payments to individuals by the Government, such as social security payments, does result in tax expenditures. Other Government programs extend benefits in kind to individuals. Examples are medicare and public education. Since these benefits are received in kind they cannot be used, like cash, for purposes fully consistent with the recipient's preferences. Moreover, their cash value is often difficult to identify with certainty. Thus the exclusion of in-kind benefits from income subject to tax is not considered to result in tax expenditures. The dividing line between nontaxable Government benefits that do result in tax expenditures and those that do not is essentially arbitrary. The most ambiguous case is food stamps. They are so nearly the equivalent of cash that their exclusion from income subject to tax might be considered to result in a tax expenditure, but this is not done in the analysis that follows.
- *Capital gains and losses.*—Although the base of a theoretically pure income tax would include net capital gains as they accrue, practical problems prevent identifying and taxing unrealized capital gains for many types of assets. Hence, the normal structure taxes such wealth accruals only when "realized." The exclusion from taxable income of one-half of realized capital gains, and the option of having up to \$50,000 of realized capital gains taxed at a 25% rate, clearly results in a tax expenditure. At death, an individual may hold assets that have appreciated in value. When, as under current law, these gains are not deemed to have been realized in the year of death, they have been completely excluded from income subject to tax during the lifetime of the decedent. The failure to deem unrealized capital gains as income in the year of death is considered, for purposes of this analysis, to result in a tax expenditure. Prior to the enactment of the Tax Reform Act of 1976, the estate, an heir, or other beneficiary would take the market value of the decedents' assets at the date the estate was valued as the basis against which to measure realized gain or loss. Thus gains which had accrued before death were never subject to tax. Under the 1976 act, the estate or beneficiaries are to carry over the decedent's basis and thus be subject to tax on gains which accrued during the lifetime of the decedent as well as gains which accrued subsequent to inheritance. As a means of phasing in this provision, a decedent's basis is generally deemed to be the assets' value on December 31, 1976, or, if acquired later, the acquisition date. The tax on such gains partially offsets the tax expenditure resulting from the failure to include capital gains in income subject to tax in the year of death.

- *Gifts and bequests.*—The tax system subjects gifts and bequests, which are usually made within a family, to taxes separate from the income tax. Therefore their exclusion from the recipient's taxable income under the individual income tax does not result in a tax expenditure. Another set of tax expenditures could be defined for departures from a "normal structure" for gift and estate taxes, but to do so would be beyond the scope of this analysis.
- *Forms of business organization.*—The tax law recognizes different forms of business organization including corporations, partnerships, small corporations treated in a manner similar to partnerships, cooperatives, mutual insurance companies, and individual proprietorships. The provisions of the tax law that accommodate different forms of business organization do not generally result in tax expenditures so long as income is subject to tax at either the business entity or individual level.
- *Treatment of individuals and corporations as separate taxpaying entities.*—A theoretically pure income tax would integrate the taxation of individual and corporate income to avoid multiple taxation of any particular type of income. Only individuals would be taxed; corporate income would be taxed to shareholders, whether or not it was distributed in the form of dividends. However, for practical reasons, separate taxation is accepted as part of the normal tax structure for purposes of this analysis.
- *Deduction of business expenses.*—The deduction of business expenses is necessary to determine taxable income. Tax expenditures do not ordinarily result from applying the definitions of business expenses prescribed by the Internal Revenue Code and Internal Revenue Service interpretative regulations. This rule is followed in tax expenditure analysis even when the deduction of certain expenses, such as those for entertainment and meals, can be challenged on normative grounds. Tax expenditures do occur when the tax code permits business or investment expenditures that are capital outlays in economic terms to be treated as current expenses. In the case of depreciation the Internal Revenue Code allows as a deduction "a reasonable allowance for the exhaustion, wear and tear (including a reasonable allowance for obsolescence)" on property used in a trade or business or for the production of income. To avoid judging every taxpayer's depreciation deductions against a standard of reasonableness, the code permits standard depreciation techniques and guideline lives to be used. In some cases, tax expenditures result because the permitted technique clearly results in excess depreciation being claimed. In other cases, tax expenditures result because the useful life is artificially short. With respect to machinery and equipment, the asset depreciation range (ADR) system, which became effective in 1971, defines a band within which estimates of useful life are deemed to be "reasonable". That band is determined by reference to guideline lives for broad classes of property and ranges 20% up and 20% down from the "asset guideline period." This analysis treats the ADR system as resulting in a tax expenditure when taxpayers who use the ADR system reduce the lives of depreciable assets below the guideline period.

- *Foreign tax credits.*—To avoid the double taxation of income earned abroad, and thus accommodate the U.S. tax system to international norms, the normal structure of income taxes includes tax credits for foreign income taxes paid.
- *Income of controlled foreign corporations.*—The income of foreign corporations controlled by U.S. corporations or citizens is generally not subject to U.S. tax until that income is repatriated. There are certain exceptions in order to avoid abuse in tax-haven countries. The deferral of income of controlled foreign corporations has been included as a tax expenditure item in this analysis, since it is an exception to the basic precept of our tax system that U.S. corporations and citizens are subject to tax on their worldwide income.

The above discussion does not exhaust the definitional complexities inherent in the tax expenditure concept nor does this analysis consider all special tax provisions. Some items have not been considered because the issues have not been fully studied or because there is insufficient information available on which to base a sound estimate. Some items are omitted because the revenue loss is relatively small (less than \$5 million).

The distinction between the normal tax structure and those exceptions leading to tax expenditures does not imply that the features of the normal tax system should be exempt from periodic analysis and review. Like tax expenditures, many features of the normal tax structure have major effects upon the level and composition of economic activity and the distribution of income; some features affect the everyday activities of corporations, trusts, and partnerships. Budget outlays, or other policy instruments, are alternative means to achieve the objectives of some features of the normal tax structures just as they are often a potential substitute for tax expenditures.

MEASURING TAX EXPENDITURES

The tax expenditure estimates reported below in table G-1 have been prepared by the Treasury Department and are based upon tax law as of December 31, 1977. The estimates show the loss of budget receipts resulting from each of these particular features of the tax system by fiscal years. For those tax expenditures resulting from the exclusion from taxable income of Federal Government payments to individuals, the underlying estimates of payments upon which the tax expenditure estimates are based are those shown elsewhere in the budget; hence they reflect any proposed changes in those programs.

Each estimate assumes that the tax provision in question had never been a part of the tax system but that all other features of the tax system, including the structure of rates, remain unchanged. In most cases, the hypothetical deletion of the special tax provision would increase taxable income for certain corporations or individuals; existing marginal tax rates are then applied to the estimated change in taxable income to compute the tax expenditures. For each itemized nonbusiness deduction for individuals, the estimated revenue loss is based upon the amount by which the standard deduction is exceeded. Tax expenditures resulting from credits are simply equal to the estimated credits claimed by all taxpayers. Economic conditions are

assumed to remain unchanged in response to the hypothetical change in the tax laws. No "second order" effect is included in the estimate because it is assumed that some offsetting fiscal or other action would be taken to keep economic aggregates on the same path that underlies all budget estimates.

Taxpayer behavior is assumed to remain unchanged in response to the hypothetical repeal of a tax expenditure provision even though, to the extent that tax expenditures intended to encourage certain economic activities have been successful, their elimination would presumably change taxpayer behavior. This change would alter the mix of economic activity within the assumed, constant economic aggregates. Any effect on receipts of a different mix of activity is not reflected in the estimates.

Whenever possible, sample data from tax returns have been used to estimate tax expenditures. These data are not, however, available for the years presented in this analysis, as these returns have not yet been filed or tabulated. Consequently, the estimates must be made by extrapolating sample tax return data from past years by means of other, more current information including the economic forecast used in estimating budget receipts and outlays. Many tax expenditures result from excluded income, not reported on tax returns. In these cases estimates must be based upon other data sources. Any changes scheduled by existing law, such as the phasing in or out of specific provisions, are accounted for in the estimates.

The estimates are reduced by any minimum tax liabilities associated with particular items. The minimum tax on tax preferences was introduced in 1969 in an attempt to assure that individuals and corporations receiving tax preferences do not escape bearing a share of the tax burden. Several tax expenditure items are included in the base of the minimum tax. The Tax Reform Act of 1976 increased the minimum tax rate from 10% to 15%. For individuals the exemption level was reduced from \$30,000 plus regular taxes paid to the greater of \$10,000 or one-half regular taxes paid. For corporations the exemption level was reduced from \$30,000 plus regular taxes paid to the greater of \$10,000 or regular taxes paid. The Tax Reduction and Simplification Act of 1977 removed the expensing of intangible drilling costs to the extent of related oil and gas income from the base of the minimum tax for calendar year 1977.

The Tax Reform Act of 1976 also introduced "at risk" rules that limit deductions attributable to an individual's investment to the amount of the investment plus the debts for which the taxpayer is personally liable. These limitations apply to certain types of investments: farming, exploring for or exploiting oil and gas resources, motion picture films and video tapes, and equipment leasing. Some of the deductions that are disallowed by these rules result in tax expenditures and some do not, hence there is no good way to reduce tax expenditure estimates for particular items by the revenue gained as a result of the at-risk rules.

Some tax expenditure items affect the timing of deductions or the receipt of taxable income. Examples are depreciation in excess of straight line for buildings and rental housing and the deferral of income by domestic international sales corporations (DISC's). These provisions create a permanent tax expenditure even though for a particu-

lar taxpayer, transaction, or asset the special provision may defer a tax rather than eliminate it. However, for a stable or growing business with an indefinite life, the deferral of taxes continues forever under most of these provisions. Furthermore, as the economy grows, these amounts increase over time. Estimates for these items show the difference between budget receipts under current law and budget receipts if a different law had always been in effect. These figures therefore generally show more than the revenue that could be obtained in the first years of a transition from one tax law to another. They are long-run estimates at the levels of economic activity assumed for the years in question.

Tax expenditure estimates cannot be simply added together to form totals for functional areas or a grand total. In some cases the revenue gain resulting from the deletion of two tax expenditure items would be greater than the sum of the individual estimates. For example, if interest income from State and local government securities were made taxable and capital gains were taxed at ordinary rates, many more individuals would be pushed into higher tax brackets than if just one of these sources of income became fully taxable; the combined effect on revenue would be greater than the sum of the two separate estimates. In other cases, the revenue gain from the deletion of two items would be smaller than the sum of the individual estimates. For example, if the deductibility of mortgage interest payments and homeowner property taxes were both repealed, and the standard deduction unchanged, many individuals who now itemize their deductions would opt for the standard deduction, thus limiting the revenue gain. In general, elimination of multiple items that are personal deductions would increase revenue by less than the simple sum of the revenue gains from eliminating each item measured separately, since many taxpayers would switch to using the standard deduction. Conversely, elimination of multiple items that are exclusions from adjusted gross income would increase revenue by more than the sum of the individual gains as taxpayers would be pushed into higher tax brackets.

To illustrate the aggregation problem, the revenue gain resulting from a hypothetical repeal of all itemized deductions that result in tax expenditures would be \$24.7 billion in 1979, whereas the simple sum of the tax expenditure for each separate item is \$32.9 billion. The estimate for the combined effect of all such deductions was derived from a model of the tax system that accounts for the interaction between tax expenditures provisions and the provisions of the normal structure. Because of this aggregation problem, the repeal of the tax expenditure items proposed in the President's tax reform program will not yield as much revenue as the sum of the tax expenditures affected. The aggregations of related tax expenditure items that are presented and discussed in the next section have been specially estimated so as to account for the interactions referred to above. Where tax expenditures for both individuals and corporations result from the same tax code provision, such as the investment tax credit, the two estimates may appropriately be added together.

TAX EXPENDITURES BY FUNCTION

Estimates of tax expenditures are grouped together by functional category and presented in table G-1. The estimates are shown sep-

arately for individuals and corporations. In prior years, three special categories were used to classify certain tax expenditure items—business investment, personal investment, and other tax expenditures. This practice has been discontinued this year in order to conform with the classifications used by the Congressional Budget Office and various congressional committees. In this analysis, all tax expenditures have been classified according to the functional categories used for budget outlays into which they most closely fit. A brief description of each of the special tax provisions for which a tax expenditure estimate is shown in table G-1 follows.

National defense.—The housing and meals provided military personnel, either in cash or in kind, are excluded from income subject to tax. Disability-related military pensions received by current retirees are largely excluded from taxable income. The Tax Reform Act of 1976 terminated the exclusion of noncombat related disability pensions for those who entered the armed services after September 24, 1975. However, most of those who would qualify for such retirement could choose to receive disability compensation from the Veterans Administration which remains free of taxes.

International affairs.—Prior to 1976, a U.S. citizen was generally able to exclude up to \$20,000 a year of foreign earnings if the taxpayer was a bona fide resident of a foreign country. After 3 years of foreign residence a taxpayer could exclude up to \$25,000 a tax year of foreign earnings. The Tax Reform Act of 1976 modified these provisions, limiting the exclusion to \$20,000 only for employees of U.S. charitable organizations and reducing it to \$15,000 for all others, denying tax credits for foreign taxes paid on excluded income, and taxing income beyond the amount eligible for exclusion at the higher bracket rates that would apply if the excluded income were also subject to tax. The effective date of the 1976 act provision was delayed by one year, until January 1, 1977, by the Tax Reduction and Simplification Act of 1977. The estimates also reflect the tax-exempt status of certain allowances received by Federal employees working abroad.

The profits of a domestic international sales corporation (DISC) are not taxed to the DISC but instead are taxed to the shareholders when distributed to them. This deferral is available for 50% of the export income of a DISC. Deferral is permitted to the extent that current export gross receipts exceed 67% of the DISC's average for a 4-year moving base period. DISC's with less than \$150,000 of taxable income are exempt from the incremental rule.

Taxes on the income of controlled foreign corporations are deferred until that income is repatriated to parent U.S. taxpayers. The estimate for the resulting tax expenditure is net of any foreign tax credits that would be claimed if the income of foreign subsidiaries were subject to U.S. tax on a current basis.

The Tax Reform Act of 1976 phased out the 14-percentage-point tax rate reduction provided under prior law for domestic corporations qualifying as Western Hemisphere trade corporations.

General science, space, and technology.—Research and development expenditures typically result in new products or processes, cost reductions, or other outcomes the benefits from which will, in nearly all

cases, continue into the future. For tax purposes businesses may deduct all research and development expenditures in the year during which they are incurred rather than amortizing them over a number of years. The tax expenditure is estimated as if such expenditures were amortized over a 10-year period.

Energy.—Certain capital costs necessary to bring a mineral deposit into production may be deducted as current expenses rather than spread over the useful life of the property. Included in this category are the intangible drilling costs of oil wells, such as the wages of drilling crews, and the cost of developing other mineral deposits, such as expenditures for mine shafts, tunnels and stripping. The Tax Reform Act of 1976 added to the base of the minimum tax for individuals intangible drilling costs in excess of the amount that would be deductible if capitalized and amortized over 10 years or if deducted pursuant to a cost depletion method. The Tax Reduction and Simplification Act of 1977 limited this element of the base of the minimum tax to amounts in excess of related income for calendar year 1977.

Extractive industries generally use percentage depletion rather than cost depletion. Under cost depletion, actual outlays, to the extent not immediately expensable, may be deducted over the productive life of the property, much as businesses may take deductions for the depreciation of other capital goods. Under percentage depletion, businesses in the extractive industries may deduct a prescribed percentage of gross income (at rates ranging from 22% for oil and gas to 5% for certain minerals, but not more than 50% of net income from the property or 65% of taxable income in the case of oil and gas). Percentage depletion is not limited to the cost of the investment as is cost depletion. The basis for "cost depletion" is reduced to the extent certain costs are recovered through expensing of exploration and discovery costs and intangible drilling costs. There is no comparable reduction in "percentage depletion" for costs which are allowed as expenses. The Tax Reduction Act of 1975 limited the application of percentage depletion to independent oil and gas producers and royalty owners and to specific quantities of output. The act phased the percentage depletion rate for oil and gas down from 22% through 1980 to 15% in 1984 and thereafter.

Royalties from coal deposits are treated as capital gains, rather than ordinary income.

Natural resources and environment.—The interest income on State and local government bonds issued to finance the pollution control facilities of private firms is exempt from Federal income tax. The volume of outstanding bonds issued for this purpose has been growing rapidly in recent years.

Table G-1. TAX EXPENDITURE ESTIMATES BY FUNCTION ¹

(In millions of dollars)

Description	Corporations			Individuals		
	1977	1978	1979	1977	1978	1979
National defense:						
Exclusion of benefits and allowances to Armed Forces personnel.....				1,095	1,260	1,370
Exclusion of military disability pensions.....				105	115	120
International affairs:						
Exclusion of income earned abroad by U.S. citizens.....				545	360	385
Deferral of income of domestic international sales corporations (DISC).....	945	1,135	1,335			
Deferral of income of controlled foreign corporations.....	570	615	665			
Special rate for Western Hemisphere trade corporations.....	35	25	15			
General science, space, and technology:						
Expensing of research and development expenditures.....	1,395	1,450	1,520	30	30	30
Energy:						
Expensing of exploration and development costs.....	820	885	965	210	300	300
Excess of percentage over cost depletion.....	1,090	1,120	1,210	305	340	370
Capital gains treatment of royalties on coal.....	10	15	15	45	50	60
Natural resources and environment:						
Exclusion of interest on State and local government pollution control bonds.....	170	220	265	85	110	130
Exclusion of payments in aid of construction of water and sewage utilities.....	15	10	10			
5-yr amortization on pollution control facilities.....	-80	-130	-45			
Tax incentives for preservation of historic structures.....			5			5
Capital gains treatment of certain timber income.....	185	205	230	55	60	65
Capital gains treatment of iron ore.....	5	5	10	5	5	10
Agriculture:						
Expensing of certain capital outlays.....	80	70	75	375	445	460
Capital gains treatment of certain ordinary income.....	10	10	10	330	350	365
Deductibility of noncash patronage dividends and certain other items of cooperatives.....	455	490	525	-165	-175	-185
Commerce and housing credit:						
Dividend exclusion.....				450	475	505
Exclusion of interest on State and local industrial development bonds.....	195	235	270	95	115	135
Exemption of credit union income.....	70	80	90			
Excess bad debt reserves of financial institutions.....	535	705	790			
Deductibility of mortgage interest on owner-occupied homes.....				4,490	4,985	5,530
Deductibility of property tax on owner-occupied homes.....				4,205	4,665	5,180
Deductibility of interest on consumer credit.....				1,785	2,120	2,350
Expensing of construction period interest and taxes.....	475	500	525	150	140	90
Excess first-year depreciation.....	45	45	50	140	145	155
Depreciation on rental housing in excess of straightline.....	80	70	70	320	300	290

See footnote at end of table.

Table G-1. TAX EXPENDITURE ESTIMATES BY FUNCTION¹—Continued
(In millions of dollars)

Description	Corporations			Individuals		
	1977	1978	1979	1977	1978	1979
Commerce and housing credit—Continued						
Depreciation on buildings (other than rental housing) in excess of straight line.....	160	140	130	140	125	115
Asset depreciation range.....	1,955	2,245	2,640	100	115	135
Capital gains (other than farming, timber, iron ore, and coal).....	520	540	575	6,910	7,430	7,990
Deferral of capital gains on home sales.....	-----	-----	-----	890	935	980
Capital gains at death.....	-----	-----	-----	7,280	8,120	8,975
Corporate surtax exemption.....	3,875	3,885	3,540	-----	-----	-----
Investment credit.....	8,880	10,735	12,320	2,075	2,390	2,725
Credit for purchase of new homes.....	-----	-----	-----	100	-----	-----
Transportation:						
Deductibility of nonbusiness State gasoline taxes.....	-----	-----	-----	685	760	840
5-yr amortization on railroad rolling stock.....	-35	-40	-40	-----	-----	-----
Deferral of tax on shipping companies.....	130	105	85	-----	-----	-----
Community and regional development: 5-yr amortization for housing rehabilitation.....						
	10	5	5	15	10	5
Education, training, employment, and social services:						
Exclusion of scholarship and fellowship income.....	-----	-----	-----	245	295	330
Parental personal exemption for students age 19 or over.....	-----	-----	-----	750	770	790
Exclusion of employee meals and lodging (other than military).....	-----	-----	-----	280	300	325
Exclusion of contributions to prepaid legal services plans.....	-----	-----	-----	5	10	15
Investment credit for employee stock ownership plans (ESOPs).....	245	255	305	-----	-----	-----
Deductibility of charitable contributions (education).....	235	255	285	525	585	645
Deductibility of charitable contributions to other than education and health.....	290	315	350	3,935	4,370	4,855
Maximum tax on personal service income.....	-----	-----	-----	555	665	800
Credit for child and dependent care expenses.....	-----	-----	-----	475	525	575
Credit for employment of AFDC recipients and public assistance recipients under work-incentive programs.....	15	15	20	-----	-----	-----
Jobs credit.....	565	1,475	1,035	125	985	860
Health:						
Exclusion of employer contributions for medical insurance premiums and medical care.....	-----	-----	-----	5,560	6,340	7,225
Deductibility of medical expenses.....	-----	-----	-----	2,230	2,435	2,655
Expensing of removal of architectural and transportation barriers to the handicapped.....	5	10	10	-----	-----	-----
Deductibility of charitable contributions (health).....	145	160	175	790	875	970
Income security:						
Exclusion of social security benefits:						
Disability insurance benefits.....	-----	-----	-----	470	550	605
OASI benefits for retired workers.....	-----	-----	-----	3,790	4,210	4,700
Benefits for dependents and survivors.....	-----	-----	-----	860	950	1,040
Exclusion of railroad retirement system benefits.....	-----	-----	-----	250	265	280

See footnote at end of table.