

HEALTH, EDUCATION, AND WELFARE INDICATORS AND TRENDS

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Much effort has been devoted in the Department of Health, Education, and Welfare to bringing together statistical information on a wide variety of subjects that relate to the human resources of the Nation and to presenting this information in a form that will be useful to those who are concerned with the health, education, and welfare of the people.

One objective of this activity has been to assemble, organize, interpret, and present statistics for executive use. In this connection there has been intensive examination of data of many classifications--economic, social, cultural, etc.--to find the best measures of national developments and appropriate indicators of current and emerging problems.

A part of the effort to make statistical data conveniently available to policy officials has involved the development of the monthly Health, Education, and Welfare Indicators and its annual supplement, the Health, Education, and Welfare Trends. It is the purpose of this paper to describe the evolution of these documents and to report on the plans that are now underway to make them available to the public.

A Reexamination of Statistical Reporting to Departmental Officials

In January 1957 the Program Analysis Officer of the Department initiated a reexamination of the manner in which statistical data were being received and used in the Office of the Secretary. He was concerned especially with whether trend information on appropriate subjects was reaching officials of the Department promptly and in a form convenient for their use.^{1/}

While substantial progress had been made during 1955 and 1956 in improving the upward flow of information on program developments, the Program Analysis Officer continued to be dissatisfied with the amount, variety, and timeliness of the information--especially statistical information--regularly presented to Departmental officials. Although statistical materials were being supplied in a variety of publications, memoranda, reports, charts, and special presentations, there were still gaps and delays in the channeling of needed information.

There was a need for better methods of obtaining, organizing, and interpreting program data and other statistics compiled by the operating agencies of the Department and for securing and using pertinent data from outside sources. Better mechanisms were needed to improve the flow of data from those whose main responsibility is to produce statistics to those whose job it is to use them.

Executive Needs for Statistical Data

The first step in the reexamination of statistical reporting was to establish the needs of Departmental officials for statistical information. In this connection several basic questions were raised. What are the special requirements of a Cabinet officer for measures of national trends? Under what circumstances will he use such information? How do his needs compare with those of other officials, such as the President and Congressional leaders? How do the Secretary's needs differ from those of other officials within his own Department, such as the Surgeon General, the several commissioners, and other administrators? The views of the Secretary and of his staff assistants on these matters were solicited. A review also was made of actual requests for data that had been made over a period of time by top officials of the Department.

Although the needs of a Cabinet officer obviously would vary from person to person and from time to time, it was agreed that any Secretary should have channeled to him a fund of background knowledge that would provide correct impressions of developments and highlight current and emerging problems. This information would help him formulate judgments, encourage him to raise questions that would lead to further analysis of particular problems, and provide facts upon which he could rely in conversations with the President, in Cabinet discussions, in meetings with national organizations, and at press conferences and before Congressional committees.

It was agreed that the Secretary of Health, Education, and Welfare, with his wide range of interests and responsibilities relating to the human resources of the Nation, should be provided with up-to-date statistics on many subjects and in considerable depth. These subjects should include (1) major social and economic developments; (2) national trends in health, education, and welfare; and (3) progress in the many programs administered by the Department. Some of the specific topics under each of these categories can be cited by way of illustration.

Background information on social developments would include the dynamics of population growth, including its present and prospective size, composition, and distribution; the process of urbanization; mobility of the population; and changes in community life. Births, deaths, life expectancy, family formation, juvenile delinquency, illegitimacy, desertion, and dependency would be other subjects on which background information ought to be provided.

In the economic field basic facts would deal with business fluctuations, long-term rates of growth, increases in productivity, distribution of wealth and income, changes in price levels and in specific prices, growth of the labor force, and trends in the extent and duration of unemployment. Economic and social data would include a breakdown of national expenditure, revealing the share of public and private spending on activities and programs affecting the health, education, and welfare of the people. Included would be significant facts on government finances at all levels.

In the field of health pertinent data would include the health status of the population, including trends in morbidity and disability; the demand for and supply of health manpower; health facilities and their utilization; hospital construction; medical care prices and expenditures; health insurance; medical research expenditures; nutrition; sales of drug preparations; and environmental health factors, including radiological contamination, water pollution, and air pollution.

In education they would include the size of the school age population, retention rates, levels of achievement, prospective costs, school staffing and expected needs for teachers, construction of educational facilities, financing of school operations and construction, and national needs for specialized talent and for vocational education.

In the welfare field necessary data would include public and private social welfare expenditures; coverage under social security programs; public assistance recipients and payments; relationships between economic developments and needs for public assistance; and effects of price changes on recipients of social insurance and public assistance. In the area of vocational rehabilitation would be included the numbers of persons disabled; the number who might be restored to productive occupations; and their potential economic contribution.

A Canvass of Available Information

The second step in the review involved a survey of available statistics that would meet the requirements described above. As a part of this survey numerous Departmental and other governmental publications were review, including the Social Security Bulletin, Public Health Reports, Monthly Vital Statistics Report, Construction Review, Survey of Current Business, Treasury Bulletin, and many reports of the Departments of Commerce, Agriculture, and Labor. Extensive conversations were held with representatives of the operating agencies of the Department and with persons in other government agencies. Internal reports were analyzed and office files containing unpublished data were examined. Nongovernmental sources, such as the American Hospital Association, also were considered. In short, an effort was made to secure a comprehensive view of statistical resources, regardless of their origin or classification, that could contribute to an under-

standing of developments in health, education, and welfare.

This canvass revealed a substantial number of more or less pertinent time series relating to (1) population; (2) labor force; (3) unemployment; (4) national income and output; (5) prices; (6) governmental finances; (7) construction; (8) research and development; (9) credit; and (10) food consumption. Specifically related to health, education, and welfare were the vital statistics, morbidity, and other health data regularly compiled by the Public Health Service; the Office of Education's biennial and other educational surveys covering facilities, enrollments, staffing, and financing; the Social Security Administration's program data on social insurance, public assistance, credit unions, and child health and welfare; and other compilations pertaining to social welfare developments in the Nation as a whole. Other program statistics were available on vocational rehabilitation, food and drug law enforcement, St. Elizabeths Hospital, and on other program operations of the Department. In this survey we also noted various subjects on which information is gathered by private agencies and the availability of projections, such as of population and school enrollments, that are of particular interest to policy officials engaged in program planning.

The Concept of "Indicators" of Health, Education, and Welfare

The review of these resources revealed many time series that were compiled on a weekly, monthly, or quarterly basis, and an even larger number that were compiled annually or at some less frequent interval. Although all of them were "available" for executive use, either in a published or other form, only a small fraction in fact "trickled up" to policy officials.

With this background, we approached the third step in the reexamination of the reporting system; namely to a consideration of a suitable vehicle for the presentation of pertinent data. At hand, of course, was the Economic Indicators, prepared by the Council of Economic Advisers for the Joint Economic Committee. The Economic Indicators--with each page consisting of a brief text, graph, and statistical table--offered an attractive format that had stood the test of time. We also had studied the United Nations "Report on International Definition and Measurement of Standards and Levels of Living," which describes various types of "indicators" that reflect changes in human well-being.

In view of the established executive needs, the body of thought relating to "indicators" of human well-being, the available statistical resources, and a tested format, we decided to try what seemed like a novel idea--that is, to develop a monthly document to be modeled after the Economic Indicators, and to be called the Health, Education, and Welfare Indicators. In line with the Secretary's preference for really current data, even though on a limited number of subjects,

we decided first to concentrate on those for which weekly, monthly, or quarterly data were produced.

The summer and fall of 1957 were devoted to the preparation of an experimental issuance. By November 1957 the first milestone was reached, with the reproduction of a "trial issue,"^{2/} that contained graphs, tables, and text on some 30 subjects. The "trial issue" was submitted for comment to the Secretary and other officials, to the Department's Regional Directors, to the heads of the operating agencies of the Department, and to selected research and program analysis personnel. Outside the Department the Assistant Director for Statistical Standards of the Budget Bureau and the members of the Council of Economic Advisers were asked to evaluate the proposed report.

Answers were solicited to six questions: (1) Are the subjects those on which officials of the Department feel a need for current information and will this type of information serve their purposes? (2) Is the organization of material appropriate for presenting trend information on topics of concern to the Department? (3) Is the format suitable for easy reference? (4) What subjects are not adequately covered and what additional statistical series should be provided for? (5) How frequently should it be issued? (6) What distribution should it have?

On the whole the reaction to the "trial issue" was very favorable. The replies were most enthusiastic from officials with broad policy responsibilities and from individuals with wide program interests. There was a favorable reaction to the proposed organization, although the question was raised as to whether the format of the Economic Indicators should be followed quite so rigidly.

A Companion Document: Health, Education, and Welfare Trends

The appraisal of the "trial issue," though favorable indeed, focused attention on the limited number of current monthly series on many health, education, and welfare subjects and the consequent desirability of making effective use of annual data in order to achieve a sufficiently rounded subject-matter presentation. It was realized that a monthly report alone would not serve as the best medium for the presentation of annual statistics and for the interpretation of series that changed slowly over time.

From these considerations emerged the idea of an annual supplement to the Health, Education, and Welfare Indicators that would present long-term annual trend data. We decided that such a companion document should be developed and that it might appropriately be called the Health, Education, and Welfare Trends.

In February 1958, the Secretary directed that the Office of Program Analysis should proceed with (1) the further development and issuance of the monthly Health, Education, and Welfare

Indicators and (2) the planning of an annual volume of Health, Education, and Welfare Trends. It was agreed that both of these documents would, pending their further development, be treated as internal administrative reports but that they would be made available, in limited quantities, to persons outside the Department who would like to participate in their evaluation and to offer suggestions with respect to their further development.

In accordance with the Secretary's decision, the first regular issue was prepared in April 1958 and regular monthly issuance has occurred since that time. The reception of the Health, Education, and Welfare Indicators within the government agencies was cordial from the beginning. Some 300 copies were ordered, at their own expense, by the operating agencies of the Department. From the beginning copies were sent to the members of the Council of Economic Advisers, the Bureau of the Budget, and the White House Staff. With successive issues additional agencies were added, usually at their own request, such as the Legislative Reference Service of the Library of Congress, the U.S. Information Agency, the U.S. Delegation to the United Nations, and Congressional Committees. In July the President and the Cabinet were made aware of the progress that had been made.

During 1958 attention was divided between the development of new charts and tables of current monthly data for the Health, Education, and Welfare Indicators and of trend materials for the annual supplement.^{3/} By the end of 1958 over 100 presentations had been prepared for the two documents. Seventy-one of the charts and tables were then brought together in the 1959 Edition of the Health, Education, and Welfare Trends. In this volume were presented data on (1) population, vital statistics, economic growth and stability, and government finances; (2) health manpower, medical facilities, mental health, and incidence of disease; (3) school enrollments, graduates, teachers, educational facilities, and education finances; (4) social insurance, public assistance, child health and welfare, and credit unions; and (5) vocational rehabilitation. The topics covered in the 1959 Edition of Health, Education, and Welfare Trends did not by any means exhaust the subjects that might have been included. There were no tabulations, for example, on medical care expenditures, health insurance, water pollution, classrooms, family formation, and metropolitan growth; and only a few projections were incorporated.

Appraisals by Persons Outside Government

From the inception of this effort care was taken to secure appraisals from interested persons, both inside and outside the government. Initially these evaluations were to insure that significant types of data were not being overlooked and that appropriate use was being made of the statistics presented. This practice made us aware, at quite an early stage, that, although the initial focus was on Departmental needs, these compilations would be of interest to a much wider

audience. We began to realize that persons concerned with social trends generally would be interested in the same types of information that are required by government officials.

Sensing this interest several copies of each monthly issue of the Health, Education, and Welfare Indicators and later of the 1959 Edition of the Health, Education, and Welfare Trends were sent to persons in nongovernmental organizations for their comment, including the National Social Welfare Assembly, Social Science Research Council, the Population Council, National Bureau of Economic Research, American Federation of Labor and Congress of Industrial Organizations, American Red Cross, American Medical Association, United Community Funds and Councils of America, and the American Public Welfare Association. Copies also were sent to members of the American Statistical Association who, at the 1958 annual meeting, had indicated a desire to participate in the evaluation of the project. In addition, the Social Legislation Information Service was helpful in making copies available for comment to interested organizations among its constituents.

Public response to these documents has been cordial and indicative of the breadth of the potential audience. Great interest has been evidenced by those with a business orientation as well as those working in such fields as labor, health, and welfare administration. Almost without exception we were urged to make these documents available for sale to the public.

As a result both of the public and private interest and an appreciation of the potentialities of these documents, funds were included in the Department's appropriation for the fiscal year 1960 to make possible their further development for use by the public as well as by government agencies. It is anticipated that arrangements for public sale will be accomplished during 1960.^{4/}

Prospects for the Future

Although the Health, Education, and Welfare Indicators and the Health, Education, and Welfare Trends are still in their infancy, it may already be anticipated that they can perform an important role beyond that of serving as convenient statistical collections. They will reveal gaps in information on many subjects, and they can serve as the catalyst for the development of new measures and for the collection of new data.

They should facilitate study of the whole field of social trends. Finally, a body of data of this type may suggest improvements in the organization of interrelated series and facilitate the analysis of social problems.

^{1/} At that time Charles B. Lawrence, Jr., was the Program Analysis Officer for the Department. As his Assistant, I was assigned responsibility for carrying forward the study of trend reporting described in this paper and for developing the HEW Indicators and HEW Trends. When used in this article the pronoun "we" refers specifically to Mr. Lawrence and the author.

^{2/} It is of interest to note that coincidental with this development a similar proposal was being made to the Joint Economic Committee. In a paper submitted to the Subcommittee on Fiscal Policy and published on November 5, 1957, Katherine Ellickson, AFL-CIO, stated:

"The Joint Economic Committee could usefully initiate a set of measures of human well-being to provide objective data on progress made and wastes still requiring attention. The Committee's publication, Economic Indicators, has been most useful in providing monthly information on the Nation's economic stability and growth. Why not add a supplementary section devoted to trends in the people's welfare?"

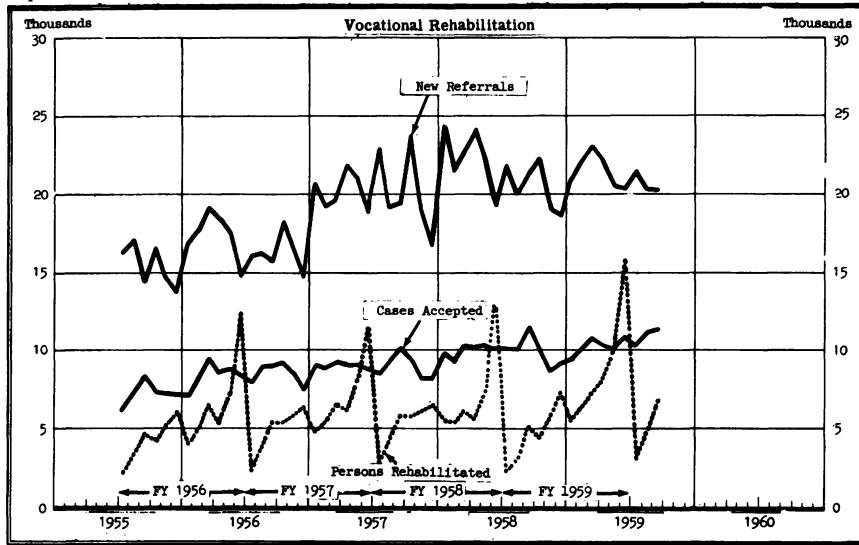
She then suggested various "indicators" illustrative of those that might be considered for inclusion: death rates at various ages, birth-rates and population growth, families, housing adequacy, national health, accident rates, levels of educational attainment, social insurance coverage, etc. (Federal Expenditure Policy for Economic Growth and Stability, Joint Economic Committee, 85th Congress, 1st Session, November 5, 1957, p. 979.)

^{3/} At the end of this paper is a sample page from the HEW Indicators and a sample page from the HEW Trends.

^{4/} Editors Note: The 1960 Edition of Health, Education, and Welfare Trends was published in April 1960 and is now available for public purchase through the U.S. Government Printing Office, Superintendent of Documents, at 50 cents a copy.

VOCATIONAL REHABILITATION

At the end of the first quarter of FY 1960, State agencies had completed 14,500 rehabilitations--40 percent above the level one year earlier. In new plans initiated, the 3-month total of 30,000 is 8 percent ahead of the first quarter of FY 1959. Active cases on hand at the close of the period reach 183,400--the all-time high for September.



| Period ^{1/} | Number during period | | | | | | Active cases at close of period | |
|----------------------|----------------------|----------------|-------------------------------|--------------|---------------|-----------------------------|---------------------------------|----------------------|
| | New referrals | Cases accepted | Plans completed ^{1/} | Cases served | Cases closed | | Total number | Ready for employment |
| | | | | | Rehabilitated | Other reasons ^{2/} | | |
| 1940 | - | 18,374 | - | 65,624 | 11,890 | 6,560 | 47,174 | 6,570 |
| 1949 | 153,334 | 99,202 | - | 216,997 | 58,020 | 25,262 | 133,715 | 10,983 |
| 1950 | 154,019 | 92,009 | - | 225,724 | 59,597 | 25,186 | 140,941 | 13,375 |
| 1951 | 153,295 | 90,603 | - | 231,544 | 66,193 | 25,783 | 139,568 | 12,948 |
| 1952 | 154,470 | 83,922 | - | 228,481 | 63,632 | 27,397 | 137,452 | 12,242 |
| 1953 | 153,969 | 84,397 | - | 221,848 | 61,308 | 27,366 | 133,174 | 11,858 |
| 1954 | 145,289 | 78,045 | - | 211,222 | 55,825 | 28,627 | 126,770 | - |
| 1955 | 176,067 | 82,269 | - | 209,030 | 57,981 | 23,476 | 127,573 | - |
| 1956 | 197,040 | 93,555 | 77,630 | 221,156 | 65,640 | 21,059 | 134,457 | 13,337 |
| 1957 | 218,638 | 104,125 | 84,622 | 238,592 | 70,940 | 23,063 | 144,589 | 15,561 |
| 1958 | 255,632 | 113,855 | 94,541 | 258,439 | 74,317 | 25,281 | 158,841 | 18,584 |
| 1959 | 252,252 | 121,559 | 100,273 | 280,384 | 80,740 | 28,533 | 171,111 | 19,686 |
| 1958 | | | | | | | | |
| July | 21,722 | 10,105 | 6,843 | - | 2,057 | 1,300 | 165,573 | 19,318 |
| August | 20,227 | 10,143 | 7,485 | - | 3,074 | 1,459 | 171,183 | 19,616 |
| September .. | 21,470 | 11,519 | 13,370 | - | 5,179 | 1,989 | 175,534 | 19,931 |
| October | 22,375 | 10,196 | 9,197 | - | 4,468 | 1,826 | 179,436 | 20,282 |
| November .. | 19,047 | 8,798 | 7,275 | - | 5,875 | 1,730 | 180,629 | 20,411 |
| December .. | 18,766 | 9,130 | 7,377 | - | 7,213 | 2,278 | 180,268 | 20,617 |
| 1959 | | | | | | | | |
| January ... | 21,051 | 9,779 | 8,237 | - | 5,545 | 2,244 | 182,258 | 21,185 |
| February ... | 21,861 | 9,754 | 7,707 | - | 6,344 | 2,305 | 183,363 | 21,034 |
| March ... | 23,054 | 10,887 | 8,382 | - | 7,351 | 2,772 | 184,127 | 21,411 |
| April | 22,069 | 10,312 | 8,447 | - | 7,900 | 3,053 | 183,486 | 20,547 |
| May | 20,541 | 10,104 | 7,694 | - | 10,011 | 2,820 | 180,759 | 19,780 |
| June | 20,069 | 10,832 | 8,259 | - | 15,723 | 4,757 | 171,111 | 19,686 |
| July | 21,684 | 10,304 | 7,484 | - | 3,155 | 1,773 | 176,487 | 20,588 |
| August | 20,270 | 10,995 | 8,386 | - | 4,538 | 1,877 | 181,067 | 20,800 |
| September .. | 20,280 | 11,213 | 13,995 | - | 6,768 | 2,085 | 183,427 | 20,504 |
| October ... | | | | | | | | |
| November .. | | | | | | | | |
| December .. | | | | | | | | |

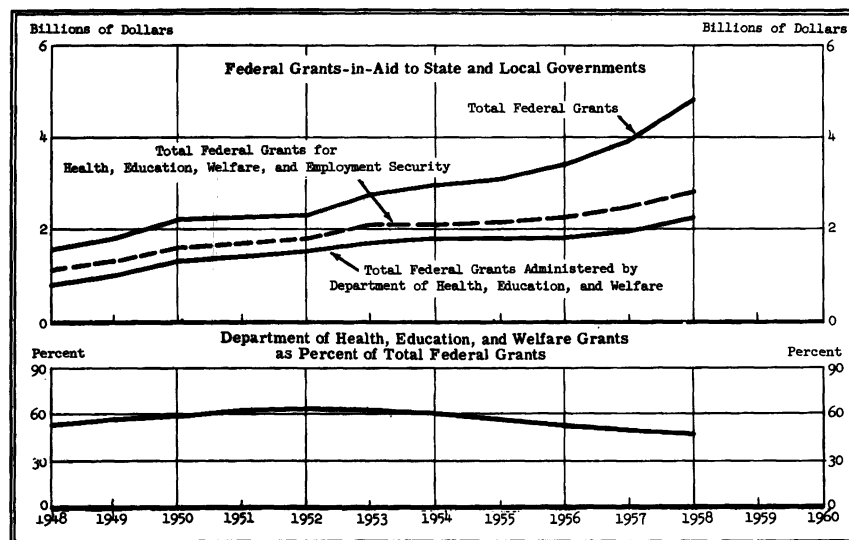
^{1/} Annual data are on a fiscal year basis; monthly data are for the calendar year designated. ^{2/} New individual rehabilitation plans initiated for clients. Prior to July 1958, data cover plans completed during the period. These two series are roughly comparable. ^{3/} Closed before or after a rehabilitation plan was initiated, because services were declined or not needed, or because of migration, illness, aggravated disability, personal factors, etc. Prior to July 1958, data were reported on a quarterly basis only.

Source: Office of Vocational Rehabilitation

SAMPLE PAGE FROM HEALTH, EDUCATION, AND WELFARE INDICATORS

FEDERAL GRANTS-IN-AID TO STATE AND LOCAL GOVERNMENTS

Federal grants-in-aid to State and local governments totalled \$4.8 billion in the fiscal year 1958. Of this total \$2.8 billion, or nearly 59 percent, were for grants for health, education, welfare, and employment security programs. The percent of all Federal grants accounted for by those administered by the Department of Health, Education, and Welfare has decreased from 64.7 percent of the total in 1952 to 47.2 percent of the total in 1958.



(In millions of dollars)

| Fiscal year | Total Federal grants-in-aid ^{1/} | Grants for health, education, welfare, and employment security ^{2/} | | | | | | All other grants | Grants administered by Department of Health, Education, and Welfare ^{3/} | |
|-------------|---|--|---------------------------------|--------|-----------|---------|-----------------------------------|------------------|---|------------------|
| | | Total | Percent of total Federal grants | Health | Education | Welfare | Employment security ^{4/} | | Total | Percent of total |
| 1948 | 1,575.4 | 1,136.6 | 72.1 | 55.3 | 113.3 | 810.3 | 157.7 | 438.8 | 834.4 | 53.0 |
| 1949 | 1,835.5 | 1,323.5 | 72.1 | 66.6 | 68.9 | 1,026.7 | 161.1 | 512.0 | 1,053.8 | 57.4 |
| 1950 | 2,208.0 | 1,644.8 | 74.5 | 123.8 | 69.9 | 1,236.6 | 214.5 | 563.2 | 1,314.3 | 59.5 |
| 1951 | 2,250.1 | 1,718.6 | 76.4 | 174.3 | 80.3 | 1,268.3 | 175.6 | 531.6 | 1,430.6 | 63.6 |
| 1952 | 2,327.0 | 1,806.5 | 77.6 | 187.4 | 143.5 | 1,292.5 | 183.2 | 520.5 | 1,505.6 | 64.7 |
| 1953 | 2,756.8 | 2,061.0 | 74.8 | 172.8 | 246.7 | 1,444.0 | 197.5 | 695.8 | 1,746.3 | 63.3 |
| 1954 | 2,956.2 | 2,128.4 | 72.0 | 140.2 | 235.2 | 1,552.8 | 200.1 | 827.8 | 1,810.9 | 61.3 |
| 1955 | 3,093.9 | 2,154.0 | 69.6 | 119.2 | 277.8 | 1,568.0 | 188.9 | 940.0 | 1,817.3 | 58.7 |
| 1956 | 3,438.2 | 2,278.1 | 66.3 | 133.2 | 252.1 | 1,632.5 | 260.3 | 1,160.1 | 1,837.3 | 53.4 |
| 1957 | 3,933.0 | 2,496.2 | 63.5 | 163.2 | 253.6 | 1,759.9 | 319.5 | 1,436.8 | 1,966.4 | 50.0 |
| 1958 | 4,800.6 | 2,824.5 | 58.8 | 193.5 | 283.7 | 2,023.1 | 324.1 | 1,976.1 | 2,266.6 | 47.2 |

^{1/} This tabulation of funds made available to State and local governments under Federal grant-in-aid programs was prepared in the Social Security Administration from data compiled by the Treasury Department on a "checks issued" basis from reports of the administering agencies. Additional detail is regularly published in the *Annual Reports of the Secretary of the Treasury* and in the June issue of the *Social Security Bulletin*. The term "grant-in-aid" as used in this tabulation is confined to Federal funds made available for cooperative Federal-State or Federal-local programs administered at the State and/or local level and for those programs in which the bulk of the funds is channeled through agencies of State and local governments. Emergency grants and the value of grants-in-kind are included when they conform to this definition. Federal aid granted directly to individuals and private institutions and reimbursements to State and local governments for expenses incurred by them as agents of the Federal government in administering programs primarily national in character have been excluded. Federal payments in lieu of taxes and shared revenues also have been excluded. Detail may not add to totals due to rounding. ^{2/} For further breakdowns of the funds made available to State and local governments under health, education, and welfare grant programs see the following additional charts and tables: *Federal Grants-in-Aid for Medical Services and Health Facilities Construction*; *Federal Grants-in-Aid for Education*; and *Federal Grants-in-Aid for Public Assistance and Child Welfare Services*. ^{3/} Includes employment service and unemployment insurance administration, 1948 to date; administration of veterans unemployment self-employment allowances, 1948-53; and beginning 1956, distribution to State accounts in Federal unemployment trust fund of certain tax collections. ^{4/} Consists principally of highway construction, housing and urban redevelopment, airport construction, natural resources, and agricultural commodity programs. ^{5/} The Department of Health, Education, and Welfare was created in 1953. Grant programs designated as administered by the Department of Health, Education, and Welfare for years prior to 1953 are those (a) presently administered by the Department that were in operation prior to its establishment; and (b) other grant programs that were administered by agencies now located in the Department.

Source: Treasury Department and Social Security Administration

SAMPLE PAGE FROM HEALTH, EDUCATION, AND WELFARE TRENDS