

Annual Report 1962



**United
States
Department
of Health,
Education,
and
Welfare**



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U.S. DEPARTMENT OF
HEALTH, EDUCATION, AND WELFARE
Annual Report 1962

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UNITED
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DEPARTMENT
OF HEALTH,
EDUCATION,
AND
WELFARE



U.S. DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE

As of June 30, 1962

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JOHN L. HARVEY	Deputy Commissioner of Food and Drugs.

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E. EMORY FEREBEE	Deputy Director of Vocational Rehabilitation.

SAINT ELIZABETHS HOSPITAL

WINFRED OVERHOLSER	Superintendent.
DALE C. CAMERON	Assistant Superintendent.

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LEONARD M. ELSTAD	President, Gallaudet College.
JAMES M. NABBITT, JR.	President, Howard University.

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Letter of Transmittal

DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE

Washington, D.C., December 1, 1962.

DEAR MR. PRESIDENT: I have the honor to submit herewith the annual report of the Department of Health, Education, and Welfare for the fiscal year ending June 30, 1962.

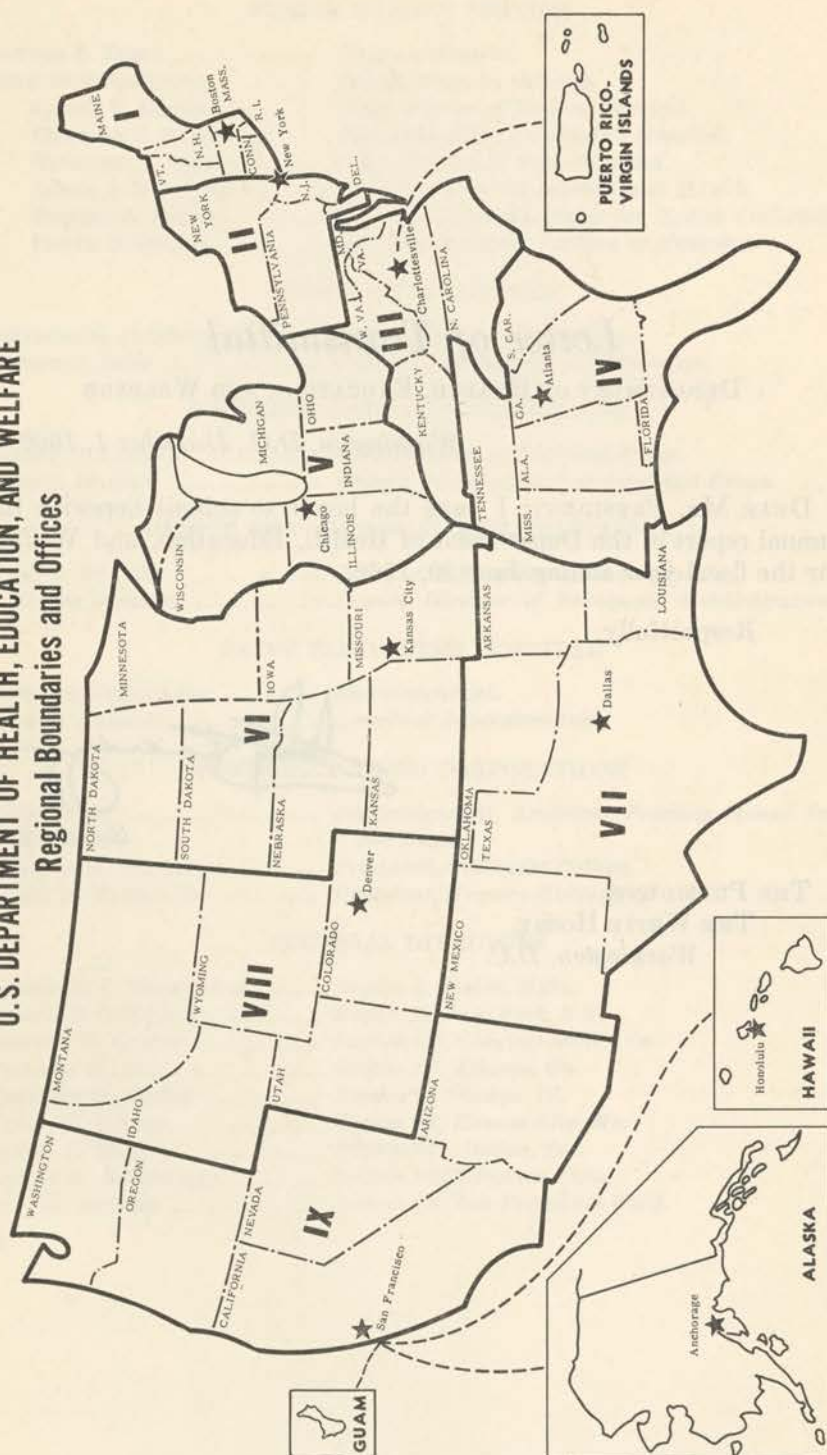
Respectfully,

A handwritten signature in dark ink, appearing to read "J. Edgar Hoover", written in a cursive style.

Secretary.

THE PRESIDENT,
THE WHITE HOUSE,
Washington, D.C.

vi



The Secretary's Report

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{ topic headings, will be found on pages 421-433 }

Anthony J. Celebrezze of Cleveland, Ohio, was nominated by the President on July 16, 1962, as the new Secretary of Health, Education, and Welfare. He was confirmed by the Senate on July 20, 1962, and was sworn in by the President on July 31, 1962. He replaced Abraham Ribicoff of Connecticut.

The Secretary's Report

THE DIMENSIONS of progress are varied and changing, and the measure of progress an intricate task. It requires looking both to the past and to the future.

This report reflects the many dimensions of progress in the Department of Health, Education, and Welfare during the fiscal year 1962. Looking back over a year of effort, it seeks to measure advances in health, education, and welfare through the Department's 112 programs. It tries also to assess the present and to anticipate the future—to identify shortcomings, realign perspectives, and to fix new sights.

To Promote the General Welfare

The responsibility of this Department—simply stated—is to help promote the general welfare of the 185 million men, women, and children who make up our national family. It is concerned with their present well-being—their hope for the future. Its constant aim is to improve the conditions of life in which we all share, to enlarge the capacity of individuals to create for themselves and their society a good—a better—life.

This is no simple task, for the conditions of modern life are increasingly complex and the problems affecting our national well-being seldom are easily solved.

We are living in an era of change—rapid, revolutionary change—in which the patterns of relationships between man and his environment and between man and his fellow man are in process of transformation. We are living in a time in which new concepts and new technologies are born in such swift succession that the stability of a society is no longer measured by its constancy but by its ability to move and adapt itself to the new conditions it has created.

The great surge forward in science and technology has not been accompanied by an equal advance in the conditions of human welfare. Social progress lags behind the achievements of our scientists and technicians.

Science has given us powerful new tools for the conquest of disease and the further expansion of human knowledge, but it has also presented mankind with new problems and new perils. The swift advance of technology in agriculture and industry has brought new prosperity to our people—new comforts and new wealth—but the increased efficiency of machinery, which brings us better products at reduced cost, has created severe personal problems for workers whose skills are displaced or made obsolete.

The extension of the average lifespan from 47 years at the beginning of this century to a record 70 years is a notable achievement, but the value of this progress in human terms is diminished by the fact that these added years of life do not always bring added years of happiness.

Our population growth, the expansion of knowledge, the unleashing of nuclear power to build or to destroy, the economic and technical revolutions of the 20th century—all these are among the complicating factors which contribute to the massive problems involved in our effort to “promote the general welfare.”

This Department’s approach to these problems is at once positive and constructive. It combines humanity and commonsense. It is rooted in the traditional American respect for independence and self-reliance. It seeks to lift the shackles that bind and handicap an individual, that prevent him from accomplishing all that he might be capable of.

In short, we view our responsibility as guarding and conserving the human resources of this Nation—protecting the well-being of the individual citizens whose combined strength is the measure of our national strength today and in the generations to come.

Organization for Action

Since its establishment in 1953, the Department has exercised its responsibilities through five major operating agencies: The Public Health Service, the Office of Education, the Social Security Administration, the Food and Drug Administration, and the Office of Vocational Rehabilitation. Late in 1962 plans were announced for the establishment of a sixth major agency—the Welfare Administration—to bring together the Department’s principal welfare programs under the direction of a new Federal Commissioner of Welfare. Programs concerned with the welfare of children, the aging, and families and individuals in need had previously been attached to the Social

Security Administration or to the Secretary's immediate office. Their regrouping under a central Welfare Administration reflects the new responsibilities placed on the Federal-State welfare programs by the Public Welfare Amendments of 1962 and the need for full-time leadership and direction for both the welfare and social security programs to insure their careful administration. The old-age, survivors, and disability insurance program, which now employs nearly half the Department's personnel, will have top-level administrative status as the primary mission of the Social Security Administration.

The work of all these agencies involves 112 separate programs and, in 1962, accounted for a total Federal expenditure of nearly \$4.5 billion. Some of these programs—such as social security and the inspection of food and drugs—are carried out directly by the Department. The majority of the Department's programs, however, are cooperative undertakings with the States which share our responsibilities for the welfare of the people.

Most of the Department's money goes out across the country in the form of grants to the States, local communities, and institutions to support local projects in health, education, and welfare, and to aid in research that promises new benefits to all people. In 1962 almost 90 percent of its budget was devoted to these purposes. The largest single expenditure was in grants for public assistance.

We do not work alone, and neither do we seek to dictate policies or to control the actions of responsible agencies—public or private—which have joined with us in this broad effort on behalf of all the American people. The fundamental philosophy underlying all the Department's programs is one of respecting, preserving, and encouraging local initiative—for here lies the true strength of America. We provide the mechanisms for cooperative action on health, education, and welfare programs throughout the land. We respond to local needs wherever possible with money and expert technical assistance. The success of our undertakings is determined not by how many programs we administer or how much money we expend but by the degree of cooperation we achieve with States and communities and with public-spirited organizations and individuals in all walks of life.

Past as Prologue

The work of the Department is based on two fundamental concepts: (1) the prevention of human suffering and waste of human potential, and (2) the rehabilitation and restoration to productive capacity of individuals who have fallen victim to the age-old scourges of disease and poverty or to newer hardships born of progress.

Our programs of prevention and rehabilitation reach across all fields of endeavor. In the field of health this kind of activity has long been familiar to the public through the efforts of the Public Health Service to control or eliminate the agents of disease. For many years the Public Health Service has worked to help insure the physical well-being of the American people through improved sanitation, accident prevention campaigns, mass inoculations against contagious diseases, insect eradication programs, and other measures essentially preventive in character. Today these programs have been extended to meet new health hazards created by man himself—among them the contamination of our atmosphere by automobile exhaust fumes and radioactive fallout, and the pollution of our waterways by manmade chemicals which have come to plague as well as protect us.

The Food and Drug Administration, too, has long played a protective role in guarding the Nation's health. Its ward is the consumer; its statutory responsibility is the protection of the public against unsafe drugs and cosmetics, contaminated foods, medical quackery, and dishonest labeling of commercial products. In many ways it serves to complement and reinforce the preventive measures of its sister agency, the Public Health Service.

The concept of rehabilitation as a public responsibility and as sound public welfare policy has been successfully pioneered by the Office of Vocational Rehabilitation in close cooperation with State agencies. This joint Federal-State program has demonstrated beyond all doubt the enormous gains in personal happiness and economic well-being that are possible for both the individual and the Nation when disabled or handicapped persons are given the opportunity to reduce their impairments, to learn new skills, to find useful employment, and to take their places as self-supporting, self-reliant members of society.

Progress—1962

In 1962 this pattern of prevention, protection, and rehabilitation was carried further into the fields of education and welfare. In this way, we have begun to knit together allied programs in separate fields, giving to each and to all greater strength and effectiveness.

Adequate education, for example, is a concept as old as civilization itself: the idea that man must learn in childhood and adolescence to provide for himself and his family in adult life. In this modern age, an individual's ability to work, to earn a living, and to enjoy the cultural benefits of the world around him depend in large part

on formal education and training. Without the basic educational skills—reading, writing, and simple arithmetic—he cannot carry out his responsibilities as a worker, a parent, and a citizen. In today's highly developed industrial society, individuals with educational deficiencies are the last to be hired and the first to be fired. Among their ranks is found the greatest incidence of disease, poverty, and crime. They make up the largest number of public welfare recipients.

Our new look in welfare, then, involves preventive health measures; adequate education; rehabilitation programs for those with physical, emotional, or educational handicaps—and, undergirding all this, a new emphasis on family and community services. These efforts require a degree of cooperation within the Department and among State, local, and private welfare agencies never before attempted on such a broad scale. Actually, there is hardly a program in the Department that is not concerned in one way or another with helping to reduce dependency—helping every citizen, old and young, to achieve the sense of personal security that is the foundation of freedom.

Building upon the past and laying new foundations for the future we have strengthened the Department's program on many fronts and in many fields:

—A focal point for cooperative health services was established with the creation of a new Division of Community Health Services in the Public Health Service. This new administrative unit works with local communities to help find ways to coordinate public and private health and medical services, and to improve and expand preventive, curative, and restorative services wherever they are needed. Under the Community Health Services and Facilities Act of 1961, we have been able to support widespread research on ways to improve out-of-hospital services, particularly for the aged and the chronically ill.

—In the vast area of medical research important gains have been made in our continuing quest for deeper understanding of the complex processes of life. The partial cracking of the "genetic code" by scientists at the National Institutes of Health and elsewhere has brought us to the threshold of understanding long-hidden mysteries involved in the systematic reproduction of all living matter and bears far-reaching implications for the future health and well-being of mankind.

—A National Institute of Child Health and Human Development was created by the Congress to provide a central facility for research on unsolved problems relating to child health, maternal health, prenatal development, and aging. At the same time the Division of General Medical Sciences was elevated to Institute status, giving added recognition to a Federal program which supports research in sciences basic to medicine and biology.

—In the area of environmental health, additional safeguards were established to protect the public from the growing dangers of air and water pollution.

Amendments to the Federal Water Pollution Control Act have enabled us to increase the amount of Federal aid to States and municipalities for construction of sewage-treatment plants so that 754 projects received Federal funds in 1962, compared with 590 the previous year. The new amendments also strengthened the enforcement provisions of the act and provided for an expanded program of research to find new ways of combating this national health menace.

New protective measures against air pollution were put into effect, and surveillance programs were intensified. An important step toward clearing the air—particularly in urban areas—was an agreement by automobile manufacturers to install blowby devices on all 1963 model cars to help reduce the amount of potentially harmful exhaust fumes from the millions of automobiles traveling the Nation's roadways.

The Federal-State Radiation Surveillance Network, which monitors the level of radioactive fallout throughout the country, was expanded from 45 to more than 65 stations, and, with the resumption of nuclear weapons testing by the U.S.S.R. in the fall, all stations were placed on a round-the-clock schedule.

—Additional protection for the consumer was provided by important changes in regulations under the Food, Drug, and Cosmetic Act. Among these are requirements for more complete and accurate information on the dangers as well as the usefulness of prescription drugs, revised inspection procedures to insure their purity, and strengthened controls over testing in clinical trials. Public attention was focused on the need for these changes when a new drug, thalidomide—which may produce tragic deformities in babies when taken by mothers during pregnancy—was widely used in clinical investigations in spite of the fact that it had been withheld from the market because its safety was questioned by Dr. Frances O. Kelsey, the responsible Federal review officer. New legislation to provide more adequate authority to control the manufacture and marketing of drugs was enacted by the Congress.

—Wider enforcement of food and drug laws covering the amount of toxic residues that may safely remain on raw foods was made possible by an increase in the FDA inspection staff and the development of improved methods of detecting and measuring agricultural poisons. Still, inspections cover only a minute fraction of the total 2½ million annual interstate shipments of fresh fruit and vegetables. Before the end of next year, by more than tripling the current number of samplings, we will bring our inspection coverage up to 1 percent

of all shipments. Appraisal of the results of this intensified program will enable us to determine whether a still further increase in the sampling and inspection coverage is necessary to assure protection of the public from unsafe residues on foods.

—A concerted effort was made to alert the public to frauds connected with medical and nutritional quackery, which cost the American consumer an estimated \$1 billion a year. New regulations have been proposed on labeling of special dietary foods to prevent exploitation of the consumer by false or misleading claims. In addition, the first National Congress on Medical Quackery was called in October and brought together representatives from private and Government agencies and the communications media to design special information projects to protect the public from hucksters of pseudomedicine.

—Programs to alleviate the problems faced by the Nation's 17.5 million senior citizens have been strengthened throughout the Department. The Special Staff on Aging was doubled in size and given an increased budget so that it could better coordinate our programs on aging and provide special services to State, community, and voluntary organizations working in this field. A 29-member panel of nationally known specialists was appointed to advise the Secretary on problems of the aging, and, upon the recommendation of this Department, a President's Council on Aging was established in May 1962 to coordinate all Federal programs in this field.

—The new amendments to our welfare laws, coupled with sweeping administrative changes in the public assistance program, have allowed us to make substantial progress in the welfare field. The newly designated Bureau of Family Services now offers a family-centered approach to welfare problems and provides a broader framework for preventive and rehabilitative services designed to help move people off the welfare rolls. Special stress has been brought to bear on meeting problems of illegitimacy, desertion, and protection of children, and on community planning responsibilities.

—There has been broad and significant expansion of child health and welfare services. Increased appropriations for 1962 permitted States to expand and extend maternal and child health, crippled children's, and child welfare services. For the first time, in 1962, Federal funds were made available for research and demonstration projects in child welfare. The 1960 amendments to the child health and crippled children's provisions, to permit special project grants to be made directly to institutions of higher education, were also implemented in 1962.

The 1962 amendments to the Social Security Act represent the most important changes in the child welfare program since 1935. These

changes provide for gradually doubling the amount authorized for annual appropriations from \$25 million to \$50 million per year; for special project grants for training personnel in the field of child welfare, including traineeships, so that insofar as it is possible there will be full geographical coverage in the child welfare services field by July 1, 1975; and for earmarking up to \$10 million of Federal child welfare funds for day-care services. Since no supplemental appropriation for day-care services during fiscal 1963 was made before Congress adjourned, this latter provision has not been implemented.

—Several important improvements were made in the old-age, survivors, and disability insurance program by the 1961 amendments to the Social Security Act. A reduction in eligibility requirements for insurance benefits brought additional thousands of elderly persons under the protective shield of social security. The new amendments increased the minimum benefits paid to retired workers in general, and increased aged widows' benefits by 10 percent. They also lowered the retirement age for men from 65 to 62 and gave added incentive to workers to continue part-time employment after retirement.

—In the field of education, although legislation to give much needed assistance to the States and to higher education failed, notable progress was made in our drive to stimulate new efforts toward excellence in the Nation's schools and colleges. A stepped-up research and development program in the field of English has set the pace for a new national appraisal of instruction in this basic subject and serves to complement the very successful programs for expansion and improvement of instruction in mathematics, science, and foreign languages operating under the National Defense Education Act.

—The passage of the Manpower Development and Training Act in March 1962 was a singular achievement in vocational education and carries important implications for the future. Here vocational education is being supported by the Federal Government on a broad national scale in an attempt to solve the problem of unemployment and consequent dependency among workers with obsolete skills or limited educational attainment. At the same time, this legislation has stimulated new approaches to the entire field of vocational and technical training. Under this program, vocational training is being directed to specific jobs in fields where manpower is in short supply. The whole field of vocational and technical education and its relationship to national manpower needs was under study during the year by a special panel of national representatives from industry, labor, and education. Their recommendations for new directions in vocational education were presented near the end of the year and provide a basis for reshaping the Federal vocational acts and the programs to which they are directed.

—The Federal-State vocational rehabilitation program passed an important milestone this year by providing physical restoration, new skills, and economic independence to more than 100,000 disabled persons. This marks the passage of the halfway post on the road to 200,000 rehabilitations a year—a goal set for the program when the rehabilitation legislation was enacted in 1954. The Office of Vocational Rehabilitation, which administers this program, was renamed the “Vocational Rehabilitation Administration” early in 1963, and its head was given the title of “Commissioner of Vocational Rehabilitation.”

—Efforts to prevent and cure juvenile delinquency have been stepped up during the year under the overall direction of the President's Committee on Juvenile Delinquency and Youth Crime, which consists of the Attorney General, the Secretary of Labor, and the Secretary of Health, Education, and Welfare. Grants under the Juvenile Delinquency and Youth Offenses Control Act of 1961 have been made to support 15 community planning projects in which cities are preparing broad action programs, 26 training programs for youth workers, and a major demonstration project—the Mobilization for Youth program in New York's lower East Side. Under the direction and coordination of the President's Committee, Federal youth-service agencies—including those of this Department—are giving technical assistance to the communities which have received grants under the act.

—By the end of 1962, over 155,000 Cuban refugees who had fled the Castro regime had registered at the Department's Cuban Refugee Center in Miami and had been provided with a variety of health, welfare, educational, and employment services. As the result of an intensive campaign conducted by the Department, with the assistance of a number of volunteer agencies, more than 52,000 of these refugees have been resettled in over 1,100 communities throughout the Nation, where they have opportunities to put their skills to use, to continue their education, and to build new lives for themselves during their exile from their homeland. The urgent need for continued resettlement efforts is underlined by the fact that two out of three of the 100,000 refugees still in the Miami area require public assistance because of the limited job opportunities there.

Tasks for Tomorrow

Against the backdrop of the past, it can truthfully be said that the American people have never been as well served—in health, education, and welfare—as they are today. But comparison with the past is an imperfect measure of progress, for we are living in a changing

present and we face an uncertain future. Our efforts of today merge with our tasks for tomorrow—and with our hopes for a better life for ourselves and our posterity.

We are not content to see the costly burden of medical care clouding the latter years of life for most of the Nation's 17.5 million people over the age of 65. The high and still-rising costs of illness in old age present a fearful specter to our older people—and to their families—for when illness strikes the elderly it can reduce otherwise independent people to poverty almost overnight. The problem we must resolve is how to provide needed health services to all older people—how to prevent illness from forcing them into the poverty and dependency which can tarnish the “golden years” of life. This administration's proposed solution to this problem is a program of health insurance for the aged, financed through social security—a plan which would make it possible for people to acquire paid-up health insurance at age 65 through small regular contributions during their working years. In addition, we will continue to encourage those States that have not done so to establish medical assistance plans for the aged under the Kerr-Mills Act of 1960.

We do not accept as inevitable and insoluble the appalling waste of human lives and the incalculable cost and suffering resulting from mental retardation among some 5.4 million American children and adults. We recognize the need to concentrate greater effort on research into the causes and prevention of mental retardation, as well as the need to make better use of our present resources and present knowledge. With the report of the President's Panel on Mental Retardation serving as a blueprint, we plan to establish a comprehensive, long-range program to prevent, treat, and alleviate this major national problem.

We are not content with our national posture in the field of education, and we will continue to press for measures to strengthen our schools and colleges. We have long recognized our obligation to protect the public interest in matters regarding public health and the quality, safety, and effectiveness of such tangibles as foods, drugs, and cosmetics. Education—although it is not manufactured, packaged, and labeled—is no less tangible a commodity for public use and no less vital to the Nation's well-being. If our young people are shortchanged in the quality of education they receive and if their educational opportunities are limited, the Nation as a whole suffers—in loss of talent and productive energy, in blighted hopes and wasted lives.

Adequate education, then, is an essential corollary to preventive measures in health and welfare. It involves increased efforts to wipe out adult illiteracy and to provide the American people—young and

adult—with the skills and knowledge essential for independent, productive lives. It requires broad retraining opportunities for men and women whose skills are made obsolete by technological advances. It calls for measures to eliminate the financial barriers to higher education for young people of limited resources but unusual ability. It means putting an end to discriminatory practices in education. It means increased attention to the quality of education our children receive. It means assurance that adequate space is available in our schools and colleges, that the schools are staffed with a sufficient number of well-trained teachers, and that the tools of education—materials and equipment—are up to date.

We are dissatisfied with our present efforts in accident prevention and public safety. During 1961 alone, 45 million people suffered accidental injuries—from motor vehicles, home accidents, poisoning, and other causes. Accidents are the fourth leading cause of death for Americans of all ages, following heart disease, cancer, and stroke. For persons aged 1-35, accidents are the leading cause of death. We believe that this needless source of human suffering—this appalling waste of life—can and must be prevented. Just as research and technology have provided us protection against the fatal and crippling effects of disease, so must they now seek out and define the real causes of accidents and develop new means of prevention.

A similar program of research and prevention needs to be launched against the problems of alcoholism and drug addiction. These costly and debilitating afflictions, which strike alike at rich and poor, have for too long been shrouded with mystery and misunderstanding. Much more can and should be done by health, education, and welfare agencies to aid in their prevention and control.

We are, in fact, not satisfied with resting on our accomplishments in any field or any program. Too many questions remain unanswered; too many problems remain unsolved.

How we ourselves have fulfilled the public trust is the final dimension to our measure of progress. We are acutely aware of the huge responsibility we bear to the American public for effective, efficient administration of the programs entrusted to our care. We are responsible for the investment of billions of dollars of public funds, and we bear a continuing responsibility to see that the public receives full returns on its investment. This means efficient management of our programs, careful expenditure of the tax dollar, resourceful use of our personnel, effective coordination among our agencies.

It is not possible in this fast-moving age to stop and say we are done. We can only pause from time to time to say that we have begun—knowing that other beginnings, other tasks, await our attention tomorrow.

Table 1.—Grants to States: Total grants under all Department of Health, Education, and Welfare programs, fiscal year 1962

[On checks-issued basis]

States	Total	Social Security Administration	Public Health Service ¹	Office of Education	Office of Vocational Rehabilitation	American Printing House for the Blind ²	White House Conference on Aging
Total.....	\$3,217,801,775	\$2,498,729,820	\$255,670,997	\$397,674,578	\$65,077,625	\$680,000	—\$31,245
Alabama.....	90,078,370	72,690,489	5,565,156	9,249,636	2,560,487	12,602	-----
Alaska.....	15,089,559	2,273,273	4,032,144	3,667,002	117,704	-----	—564
Arizona.....	27,488,912	18,027,287	2,303,172	6,592,762	559,730	5,961	-----
Arkansas.....	50,462,654	37,466,788	5,548,279	5,487,674	1,953,272	6,641	-----
California.....	330,628,600	266,248,284	11,732,450	49,252,341	3,333,797	61,728	-----
Colorado.....	56,341,752	42,477,847	2,963,365	10,160,191	734,068	6,281	-----
Connecticut.....	29,170,597	22,258,445	1,783,150	4,721,344	393,050	15,002	—394
Delaware.....	6,078,610	3,297,747	1,287,446	1,323,575	174,095	1,920	—6,173
District of Columbia.....	12,633,261	10,951,274	1,048,797	348,393	283,157	1,640	-----
Florida.....	84,899,464	64,606,081	7,761,615	10,111,498	2,401,178	18,522	-----
Georgia.....	92,888,391	71,336,812	8,304,343	9,707,697	3,522,857	16,682	-----
Hawaii.....	18,032,719	5,434,941	2,163,912	9,978,681	452,465	2,720	-----
Idaho.....	13,883,734	9,240,087	1,934,579	2,481,514	230,010	1,120	—3,576
Illinois.....	144,403,814	123,855,813	8,437,084	9,530,681	2,550,552	29,684	-----
Indiana.....	38,120,325	28,297,812	5,172,921	4,025,773	610,777	13,042	-----
Iowa.....	43,068,207	34,043,994	4,596,555	3,387,133	1,033,524	7,001	-----
Kansas.....	40,941,438	28,334,260	3,919,323	7,862,532	817,082	8,241	-----
Kentucky.....	64,676,368	53,919,707	6,075,229	3,884,331	792,231	7,281	—2,674
Louisiana.....	130,581,384	120,785,880	4,508,469	3,199,848	2,075,946	11,241	-----
Maine.....	19,592,253	14,700,171	1,541,439	2,096,998	352,045	1,600	-----
Maryland.....	40,504,810	23,810,276	4,330,878	11,639,456	710,078	14,122	-----
Massachusetts.....	98,859,859	80,327,783	5,256,330	11,867,828	1,382,419	26,483	—984
Michigan.....	97,099,575	77,806,289	7,958,318	9,671,211	1,636,747	28,124	—1,114
Minnesota.....	53,438,422	43,873,938	5,094,442	3,195,155	1,263,766	11,121	-----
Mississippi.....	51,699,232	39,824,141	6,842,519	3,881,011	1,144,840	6,721	-----
Missouri.....	105,081,945	91,722,344	5,919,687	6,148,591	1,280,402	10,921	-----
Montana.....	11,869,195	6,846,659	1,503,835	3,187,370	329,211	2,120	-----
Nebraska.....	22,491,446	15,478,274	1,958,477	4,612,366	439,899	3,761	—1,331
Nevada.....	7,150,762	3,141,089	1,323,068	2,599,947	85,818	840	-----
New Hampshire.....	9,024,148	5,227,501	1,640,136	2,017,355	142,710	1,960	—5,514
New Jersey.....	50,924,167	35,643,240	5,046,480	8,931,557	1,278,607	24,283	-----
New Mexico.....	28,265,892	17,734,091	2,713,192	7,544,939	269,229	4,441	-----
New York.....	249,136,174	214,468,265	14,735,094	14,982,889	4,888,358	61,568	-----
North Carolina.....	83,293,191	63,244,124	8,376,818	9,066,815	2,585,752	19,682	-----
North Dakota.....	14,686,441	9,160,921	2,661,535	2,462,995	399,710	1,280	-----
Ohio.....	121,243,198	98,027,086	8,986,488	12,538,008	1,659,652	31,964	-----
Oklahoma.....	105,822,373	89,715,142	4,238,034	10,305,571	1,559,545	4,081	-----
Oregon.....	29,529,064	22,660,650	2,836,451	3,324,094	699,028	8,841	-----
Pennsylvania.....	141,656,989	111,600,418	13,525,561	10,950,904	5,533,700	46,406	-----
Rhode Island.....	17,350,470	12,698,724	1,443,062	2,760,116	445,288	3,280	-----
South Carolina.....	38,037,801	24,043,689	6,032,868	6,583,910	1,370,333	7,001	-----
South Dakota.....	15,849,441	9,659,013	1,929,610	3,952,873	305,945	2,000	-----
Tennessee.....	61,232,582	46,836,688	7,067,078	5,487,145	1,829,469	12,202	-----
Texas.....	178,301,681	142,790,014	14,164,483	19,307,414	2,016,287	23,483	-----
Utah.....	16,522,808	11,165,007	1,384,575	3,685,580	292,040	2,840	—7,234
Vermont.....	7,417,059	5,354,638	1,077,820	736,501	247,260	840	-----
Virginia.....	52,871,969	24,362,816	8,327,140	18,665,073	1,503,138	13,802	-----
Washington.....	61,777,796	45,864,424	3,152,190	11,870,037	879,437	11,962	—254
West Virginia.....	52,076,932	45,817,432	2,745,407	1,920,531	1,585,399	8,561	—398
Wisconsin.....	46,333,301	34,905,620	5,726,305	4,558,708	1,132,416	11,001	—749
Wyoming.....	5,780,851	3,265,806	718,977	1,679,842	115,068	1,160	-----
Canal Zone.....	128,491	128,411	-----	-----	-----	80	-----
Guam.....	8,383,981	1,750,669	4,803,740	1,762,498	67,074	-----	-----
Puerto Rico.....	13,881,232	9,223,612	1,401,617	1,730,009	1,022,907	3,160	—73
Virgin Islands.....	604,680	303,771	69,354	204,270	27,498	-----	—213
Undistributed.....	10,913,405	-----	-----	10,872,405	-----	41,000	-----

¹ Excludes \$252,447 paid to water pollution interstate agencies.² Includes permanent annual appropriation of \$10,000.

Social Security Administration

Social Security in 1962

Significant new emphases stemming from the conviction that we can and must do more to shape our public welfare programs toward the goals of preventing and reducing dependency marked developments during fiscal year 1962. That conviction and the emphases it generated found concrete expression in actions on a broad front—in legislative developments, in administrative changes, and in new directions in social welfare research.

Achievement of a new emphasis in public welfare began with a comprehensive review of the public welfare programs of the Social Security Act. State and local welfare officials and leaders in voluntary organizations contributed to the study. This activity culminated in a number of administrative changes, detailed in subsequent sections of this report, and in the development of legislative proposals for submittal to Congress. The proposals were embodied in the Public Welfare Amendments of 1962, enacted shortly after the close of the fiscal year.

The amendments emphasize provision of services to help families become self-sufficient. The States will be enabled to provide incentives that will contribute to reduction in the need for continued public assistance. This approach recognizes the importance of rehabilitation in helping welfare recipients better to be able to care for themselves and, wherever possible, to become self-supporting.

The amendments also have the objective of maintaining and strengthening family life for children. In addition, emphasis is placed on training to increase the supply of adequately qualified public welfare personnel to provide some of the services that can help to reduce the need for and the cost of the public assistance programs.

Signifying the increased emphasis on the importance of welfare services directed toward strengthening family life and the self-reliance of individuals, the name of the Bureau of Public Assistance was changed to Bureau of Family Services effective January 1, 1962.

Other action on the administrative and legislative fronts that made our social security programs better suited to serving the Nation's

social and economic needs included implementation of the Social Security Amendments of 1961. Provisions of the 1961 amendments reduced some of the hardships resulting from old age, disability, or death of the family wage-earner by liberalizing the Federal old-age, survivors, and disability insurance program and by increasing Federal sharing in State assistance payments to the aged, the blind, and the disabled. Also, under the provisions of Public Law 87-31, 15 States extended the coverage of their aid to dependent children programs to help children of unemployed parents. The Public Welfare Amendments of 1962 included a provision making Federal funds available for such aid through fiscal year 1967.

The Juvenile Delinquency and Youth Offenses Control Act of 1961 authorized a 3-year program that provides for (1) grants to finance projects that will demonstrate and evaluate techniques and practices for the prevention and control of juvenile delinquency and youth offenses, (2) grants for the training of personnel, and (3) technical assistance services to public and private agencies working in this field. Funds were appropriated and the program was put into effect before the end of calendar year 1961.

Although important social security legislation was passed and implemented, the President's proposal for adding health insurance for the aged to the protection provided by the old-age, survivors, and disability insurance program was tabled in the Senate and remained a major issue. Continuing efforts were made to improve and extend the medical care available to needy aged persons through the regular old-age assistance program and the more recently enacted medical assistance for the aged program. But "social security protection, financed by payments made during the working years, supplemented by private programs and backed up by the Federal-State public assistance provisions for medical care," said the Secretary of Health, Education, and Welfare, "is the only way to a truly effective solution of the problem." President Kennedy announced that a bill incorporating this approach to meeting the problems arising from the costs of health care in old age would be introduced again early in the next session of Congress.

In the Social Security Administration's research program, emphasis on searching out the causes of dependency was continued from previous years.

The absence of a research effort having as its main focus increased knowledge relating to the prevention or reduction of dependency was long cited by the Social Security Administration as a major gap in the total research effort in this country. The 1956 amendments to the Social Security Act provided authorization for a program of research and demonstration grants to help fill this gap. It was not until Sep-

tember 1960, however, that funds were appropriated to implement the program. At the close of fiscal year 1962, the Social Security Administration had made thirty-nine grant awards totaling more than \$1 million to educational institutions, public agencies, and other nonprofit organizations for a broad range of research of significance to social security programs and social welfare.

Federal funds for a new program of child welfare research and demonstration grants were made available for the first time in 1962. The purpose of this grant program, which was authorized by Congress in 1960, is to provide support for (1) special research and demonstration projects in the field of child welfare that are of regional or national significance, and (2) special projects for the demonstration of new methods or facilities that show promise of substantial contribution to the advancement of child welfare. Seventeen grant awards were approved for the fiscal year.

A new international cooperative social welfare research program of the Social Security Administration is reported on in the section on international activities.

The intramural research activities of the Social Security Administration were strengthened during 1962 by steps taken in accordance with the recommendations of an advisory group of experts from outside Government. The major recommendation of the group in its August 1961 report to the Commissioner of Social Security was for the creation of a new unit in the Division of Program Research in the Commissioner's Office with responsibility for long-range research, that is, research into fundamental questions relating to the nature of poverty and insecurity in modern society, the character and dimensions of poverty, and the social and other factors involving dependency and independence.

A continuing advisory committee on research development established on the recommendation of the expert group met for the first time toward the fiscal year's close. The purpose of the committee is to assist the Commissioner in formulating a research program for the Social Security Administration—including the work of the new long-range research unit—and in stimulating close working relationships with research personnel in universities and private research centers.

Work was initiated on another major research project—a nationwide cross-section survey of persons 62 years and over, designed to provide information on the demographic characteristics, living arrangements, economic circumstances, and health care costs of old-age, survivors, and disability insurance beneficiaries and other aged persons. Among other uses, the survey will help meet the detailed information needs of the Statutory Advisory Council on Social Security, which will be appointed in calendar year 1963. It will, in addi-

tion, provide much of the information requested by the 29-member Panel of Consultants on Aging to the Secretary of Health, Education, and Welfare. As a supplement to this study, similar information on social and economic circumstances will be obtained for a sample of mother-child beneficiaries under the old-age, survivors, and disability insurance program. Field collection and tabulation will be undertaken by the Bureau of the Census under contract with the Social Security Administration.

At the end of fiscal year 1962, social insurance, related payments, and public assistance accounted for about 7 percent of total personal income in the United States. The social insurance and related payments portion amounted to \$27.2 billion on a seasonally adjusted annual basis. The payments went to beneficiaries covered by public retirement, disability, unemployment, and veterans' programs and included benefits for work injuries under Federal employer liability acts and cash and medical payments made under workmen's compensation and temporary disability insurance laws. Public assistance payments in the same month, excluding vendor payments to suppliers of medical care, were made at an annual rate of \$3.5 billion.

Under old-age, survivors, and disability insurance—the largest social insurance program by far—the number of beneficiaries in current payment status increased 11 percent during the fiscal year to 17,280,000. The monthly benefit rate increased 14 percent from \$992 million in June 1961 to \$1,128 million in June 1962.

The number of disability insurance beneficiaries increased from 200,400 at the end of fiscal year 1958—the fiscal year when such benefits first became payable—to 679,300 at the end of fiscal year 1962. The provision in the Social Security Amendments of 1960 which extended benefits to disabled workers under age 50 and to their dependents, beginning November 1960, spurred the rate of increase.

Over the 4-year period from July 1957 to June 1961, the proportion that retired workers were of total old-age and survivors insurance beneficiaries rose slightly, from 56.4 percent to 57.1 percent. At the end of fiscal year 1962, the proportion was 58.0 percent, reflecting the effect of the provision in the 1961 amendments making benefits payable to men aged 62–64. By June 30, 1962, old-age benefits had been awarded to 525,000 men aged 62–64 and wife's or child's benefits to 195,000 dependents of these men.

In federally aided assistance for persons 65 and over, 2.2 million were receiving old-age assistance, and more than 102,000 received medical assistance for the aged in the 27 States that were administering such programs in June 1962. Almost 3.7 million children and their adult caretakers received aid to dependent children, including 237,000 recipients in the unemployed-parent group; 100,000 received aid to

the blind, and 417,000 received aid to the permanently and totally disabled. In addition, 812,000 persons received general assistance financed from State and local funds. Payments for all types of public assistance for the month totaled \$365 million.

The 1962 appropriation of about \$70 million for the maternal and child health, crippled children's, and child welfare programs of the Children's Bureau, which marked its 50th anniversary on April 9, 1962, was an increase of about \$17 million over the amount available for these programs during fiscal year 1961.

More than 1,000 new members on the average joined Federal credit unions each business day in fiscal year 1962. More than \$3 billion was lent to individuals in a total membership of 6½ million in these mutually owned institutions.

Following the precedent set in naming his predecessor, Robert M. Ball, a career Social Security Administration official, was sworn in April 17, 1962, as Commissioner of Social Security to succeed William L. Mitchell.

The Social Security Administration had 35,304 employees on duty at the end of the fiscal year. The great majority of the employees were in the Federal program of old-age, survivors, and disability insurance.

International Activities

The Social Security Administration initiated new international activities during the fiscal year and cooperated in making facilities available for other programs administered by the Department of State, the United Nations, the Organization of American States, and the many voluntary agencies operating overseas exchange programs.

The SSA planned for experts and participants coming to the United States from 92 countries, an increase of 11 countries over the last fiscal year, and 17 over fiscal year 1960. Newly independent countries are looking to the U.S. for guidance in establishing their welfare and social security programs or for training of administrative or technical personnel. A majority of the participants sponsored by governmental organizations come through the United Nations programs or the Department of State's Cultural Exchange, with the Agency for International Development sending relatively few participants in the social welfare or social security field. The training programs planned for the participants and experts reflect new trends, both in the use of U.S. training resources and in areas of interest in social welfare. A greater number of the participants attended full-time graduate schools and remained to complete work for the degree. These persons were preparing for key posts in their own governments or to train personnel in their own universities. Other visitors, experi-

enced administrators coming for a shorter period, had observation programs in the several different fields of competence of the Social Security Administration—family and child welfare, planning and administration of social insurance, prevention and treatment of juvenile delinquency, training of personnel, and credit cooperatives. Requests for programs combining several areas of the social field included social services in public housing and urban development, coordinated planning for social and industrial development, and legislative planning for social security and social services.

The Social Security Administration began a new partnership in cooperation with other countries when an international research program using U.S.-owned local currencies under Public Law 480 was undertaken. Negotiations with the seven countries in which funds are available—Burma, India, Israel, Pakistan, Poland, UAR-Egypt, and Yugoslavia—resulted in the approval by the end of the fiscal year of projects in social services, juvenile delinquency, child care, and maternal and child health. Projects approved will contribute new knowledge to the United States. As an illustration, it is anticipated that one of the projects accepted will produce data useful in evaluating successful methods of working with young delinquents. Another project, a study of toxemia of pregnancy, will be of value as toxemia of pregnancy is the leading cause of maternal death in the U.S. and little is definitely known as yet of its cause.

Cooperation with the Agency for International Development reflected new aspects as a result of the foreign aid legislation which underwent drastic revision during the fiscal year. With specific language in the legislation emphasizing social as well as economic aspects of development and the "development of human resources," a base was provided for more attention to social welfare. In response to a request from the Agency for International Development Administrator, the Social Security Administration detailed a senior social welfare officer for full-time duty in the agency with a view to effective utilization of Social Security Administration resources in the foreign aid program.

In July 1961, a member of the staff of the International Service of the Social Security Administration was appointed by the President to serve as the U.S. Representative on the Directing Council of the Inter-American Children's Institute. This Council held its annual meeting at the Pan American Union in October 1961. One of its major achievements was the formulation of a proposed agreement with the Organization of American States. This agreement, which will have the effect of merging the administrative and fiscal organization of the Institute with that of the OAS while respecting its complete technical autonomy, was signed by the Director General of

the Institute and the Secretary General of the OAS in Washington in May 1962.

The 1962 conference of the International Labor Organization adopted a new convention on the subject of equality of treatment in social security. A staff member of the Division of Program Research served as advisor on the U.S. delegation.

The International Social Security Association general meeting in Istanbul in September was attended by social security officials from every industrialized country of the world and many of the less developed as well. The U.S. delegation, headed by the Commissioner of Social Security, invited the conference to hold its next meeting in the United States in 1964. This will be the first such session ever held in this country.

Research in social security systems to serve as a basis for providing technical assistance in this field was carried on cooperatively by the Social Security Administration and the Agency for International Development. Experts in social security financing and administration served as Social Security Administration consultants on the study.

At the United Nations, the 14th Session of the Social Commission in April and May 1962 marked resumption of annual Commission meetings for consideration of international social questions, social policies, and technical assistance. Chief accomplishments of the Commission were the recommendations for establishment for the first time of an international committee on housing, requests for a revamped and strengthened international social welfare program, and the development of an expert report on social and economic planning with particular attention to allocation of resources. The UNICEF Executive Board Meeting approved increased requests for funds for projects in new fields such as social services, vocational training, and education as well as continuing substantial grants in the health field. The Social Security Administration provided technical advisers for the U.S. Delegations to both the Social Commission and the UNICEF Board Meetings.

Cuban Refugee Program

In the past 2 years, the United States has become a country of first asylum for large numbers of political refugees from Cuba. The U.S. Government has found it necessary to develop a program of help for refugees from a neighboring republic and to assume major responsibility for the health, education, and welfare needs of these unfortunate people. By June 30, 1962, about 150,000 Cubans had found political refuge in the United States.

The principal port of entry for Cuban refugees is Miami, where many remain. A number of the refugees are professionally or technically trained; they were not permitted to take any resources when they left Cuba. On reaching the United States, most need assistance of one kind or another—financial aid, employment counseling, retraining, English language instruction, or help in resettlement and adjustment to American customs.

The severity of the Cuban refugee problems became evident near the end of 1960. President Kennedy early in 1961 expressed his concern and directed Secretary Ribicoff to undertake a study of the situation and to develop a program of assistance.

The program as it has developed since 1961 provides:

(1) Financial assistance, supplemented by surplus commodities, to provide food, clothing, and shelter to needy refugees registered at the Miami Cuban Refugee Center and who are living in Florida or who resettle outside Florida with the help of voluntary agencies.

(2) Financial assistance in relocating refugees to homes and jobs elsewhere in the United States.

(3) Health services and long-term hospitalization.

(4) Assistance to the public schools of Dade County, Fla., in providing instruction to the refugee children as well as English instruction and vocational training to adults.

(5) Loans to refugee students in college and funds for English and refresher courses for lawyers, doctors, and other professional persons.

(6) Care of children unaccompanied by relatives.

Administration and coordination of the program are assigned to the Commissioner of Social Security. In operating the program, the Commissioner has made full use of existing resources, as, for example, the Office of Education, the Public Health Service, the Children's Bureau and the Bureau of Family Services within the Social Security Administration, the Bureau of Employment Security of the Department of Labor, the Dade County Board of Education, the Florida State Department of Public Welfare, and the Florida State Board of Health.

Four voluntary agencies (National Catholic Welfare Conference, International Rescue Committee, Church World Service, and United Hebrew Immigrant Aid Society) are under contract with the Social Security Administration to handle the resettlement of Cubans to homes and jobs away from the Miami area to other parts of the country and overseas.

During the fiscal year 1961, the program was carried out under authorities contained in the Mutual Security Act of 1954, as amended, with expenditures of nearly \$5 million. During the fiscal year 1962, the program operated under authority contained in the Foreign Assist-

ance Act of 1961, with expenditures of \$38,502,000. On June 28, 1962, the Migration and Refugee Assistance Act of 1962 (Public Law 87-510) was enacted. This law authorizes assistance to refugees and an appropriation of \$71,110,000 for providing such assistance during fiscal 1963 was made.

Increasing emphasis is being placed on the resettlement of refugees from the Miami area to other places in the United States and overseas. New entrants from Cuba have ranged from 1,600 to 1,800 per week for the last year. By June 30, 1962, there were about 95,000 refugees living in greater Miami. Roughly 60 percent of the refugees in Florida were on assistance. Successful resettlements are essential if the refugees are to become self-supporting and the public assistance load reduced.

Thirty-two thousand two hundred fifty-five Cuban refugees had been resettled by June 30, 1962, to over 900 communities in 49 States, Puerto Rico, the Virgin Islands, and 23 other countries. The rate of resettlement has risen in fiscal year 1962 from 1,259 persons during July 1961, to 3,454 during June 1962.

A transition resettlement allowance averaging \$80 to persons receiving assistance in Miami who resettle elsewhere was authorized in May 1962. This allowance is designed to promote resettlement by allaying the fears of the refugees over being stranded without funds in a strange city. This allowance is also intended to increase the number of sponsors; by lessening their personal financial obligations, they can be asked to place greater emphasis on providing personal services.

The intensive efforts made to accelerate resettlements and to stimulate employment opportunities are reflected in the approximately 8,800 public assistance cases closed between January and June 1962. About 38 percent of the cases closed represented resettlements, and 31 percent represented reemployed persons.

During the fiscal year, some 28,000 individuals, or 12,700 refugee family groups, were resettled in communities outside Florida. Relatively few of the resettled refugees (about 400 in June 1962) had to apply for assistance from local welfare agencies in the new communities; and, in most cases, the duration of assistance payments was relatively short.

Plans were completed for the Cuban Refugee Emergency Center in Miami to move into much larger quarters on July 1, 1962. It will now be possible to step up resettlement work because more workers can be added by the voluntary agencies for this purpose. The Center was established in Miami as a focal point for Cuban refugee registration and resettlement activities and to coordinate the local aspects of the Federal Government's general program of aid to Cuban refugees.

At the beginning of fiscal year 1962, 35,000 Cuban refugees had registered at the Center, and registrations were at the rate of 5,600 a month. Registrations at the end of the fiscal year were at the rate of 7,400 a month, and 90,000 refugees registered at the Center during fiscal year 1962.

ASSISTANCE PROVIDED TO CUBAN REFUGEES

By request of the Commissioner of Social Security, the Bureau of Family Services became an active participant in the emergency program of assistance to Cuban refugees in January 1961, when members of the Bureau's staff made an initial reconnaissance visit to Miami. The Bureau also participated in the Department's task force which developed basic data for a comprehensive Federal program of health, education, employment, welfare, and resettlement services for needy Cuban refugees.

In February 1961, the Bureau was assigned operating responsibility for temporary financial assistance and related social and welfare services.

Under an agreement with the Social Security Administration, the Florida State Department of Public Welfare administers the Bureau's part of the program, using assistance standards similar to those established for other Florida residents in providing the basic necessities of life and hospital care.

Other State public welfare agencies provide assistance to refugees whose resettlement plans, for a variety of reasons, are not fulfilled or who need other services.

By the end of June 1961, approximately 8,700 cases had received assistance under the program in the Miami area. By September 1961, this number had increased to 12,600 and to 28,000 by the end of June 1962. During this 9-month period, 31,500 applications were received—an average of 715 per week. Many were emergencies. During August and September, the number of boat cases averaged 100 per week. These were persons who escaped Cuba in small craft and who needed immediate assistance and services, often medical care due to dehydration, overexposure, and injuries incurred en route.

UNACCOMPANIED CUBAN REFUGEE CHILDREN'S PROGRAM

By delegation from the Commissioner of Social Security, the Children's Bureau is responsible for child welfare services, including the care and protection of unaccompanied Cuban children. These were described by the President as "the most defenseless and troubled group among the refugee population." The Florida State Department of Public Welfare acts as agent for the Department of Health, Education, and Welfare and bears responsibility for the overall supervision and administration of the Cuban Child Welfare Pro-

gram, implemented by contracts with voluntary agencies which accept children for placement in group care or in foster family care.

The four voluntary agencies under contract with the Florida State Department of Public Welfare are the Catholic Welfare Bureau, Miami; Jewish Family and Children's Service, Miami; United Hebrew Immigrant Aid Society, Inc.; and the Children's Service Bureau of Dade County, Miami. These agencies have arranged placement for the children through cooperating child-placing agencies or institutions in the various States licensed or approved by appropriate State authorities.

On June 30, 1962, more than 6,100 Cuban children had received either group care or been placed in foster family homes since the beginning of the program. More than 2,400 Cuban children, or about 40 percent of the total number placed had been reunited with their parents or with the family group as it was constituted in Cuba.

Of the almost 4,000 children remaining under care on June 30, 1962, 71.2 percent were in group care and 19.7 percent in foster family homes. Thirty-eight percent of the children were being cared for in the Miami area while 62 percent had been placed outside the Miami area in 38 States and 85 communities. The majority of the children under care on June 30, 1962, were adolescent boys; over 60 percent of the total number of children under care were boys, and over 85 percent were over 10 years of age.

The large number of children arriving and the emergency nature of the program made it necessary to place over 75 percent of them in institutions or group homes until foster family homes became available or until the children could be returned to their own parents or relatives. Since it has been assumed that these children will eventually be returning to their parents who still have guardianship, the children cannot be placed for adoption.

Old-Age, Survivors, and Disability Insurance

The federally administered old-age, survivors, and disability insurance program plays a major role in achieving our national goal of eliminating dependency and want. It provides the base upon which almost every American builds his plans for family security in old age and in the event of his death or disablement. Under the program about 9 out of 10 gainfully employed people—self-employed as well as employees—contribute toward providing income for themselves and their families when their work income is cut off or greatly reduced by retirement or is cut off by disability or death. In the course of a year about 74 million earners contribute to the program. More than

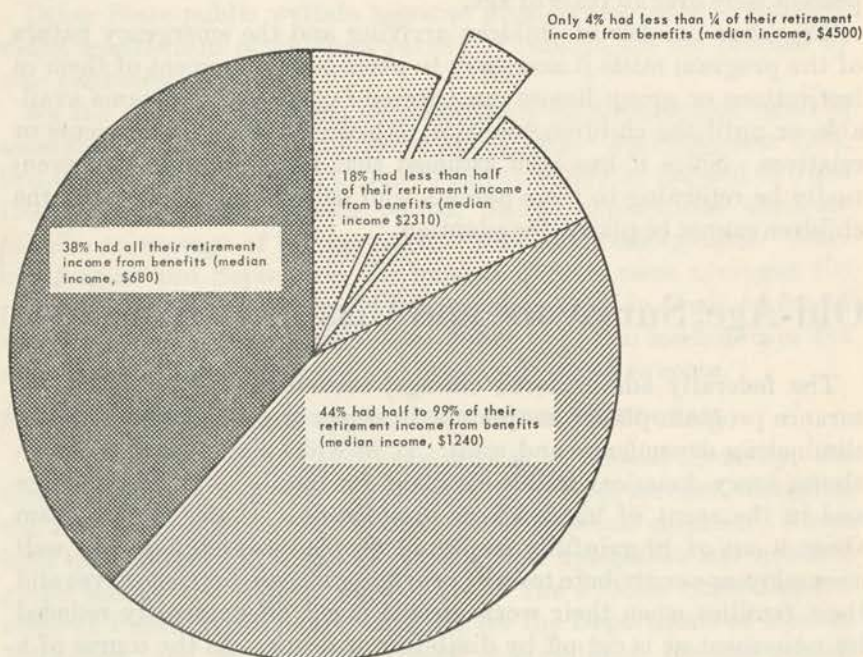
9 out of 10 mothers and children are protected against loss of income resulting from the death of the family breadwinner.

Eighty-seven percent of the people reaching age 65 in 1962 were eligible for retirement benefits and, based on present projections, this proportion will rise to about 95 percent by 1985. Two-thirds of the insured group under age 65—over 50 million workers—have enough credits to meet the work requirements for disability insurance benefits and this proportion will also increase each year.

By the end of fiscal year 1962 over a billion dollars in benefits was being paid each month to about 17.3 million beneficiaries.

These benefits make up a critical part of the income on which the retired aged, the permanently and totally disabled, and widows and orphans must rely for support. They are an especially important source of support for old people. A survey conducted by the Bureau of Old-Age and Survivors Insurance in 1957 indicated that for more than half of the aged social security beneficiaries the benefit is the only significant source of regular income, and for the great majority of the others the benefit is the major source of regular income. (Chart 1.) Of course, a survey of old-age and survivors insurance beneficiaries taken today would be expected to show that more beneficiaries

CHART 1.—82 PERCENT OF AGED BENEFICIARIES HAD HALF OR MORE OF THEIR RETIREMENT INCOME FROM BENEFITS*



*Data from a nation-wide survey of aged beneficiaries made in 1957.

have additional sources of retirement income. The number of people getting payments under private pension plans, for example, has increased substantially in recent years. Since the number of aged old-age and survivors insurance beneficiaries has grown at about the same rate, though, the proportion of old-age and survivors insurance beneficiaries getting such income would not be very much different today than it was in 1957. And, even though vesting provisions are becoming more common in private pension plans and the coverage of such plans is growing, old-age and survivors insurance benefits will continue to be the main reliance of a majority of retired persons in the foreseeable future as it is today.

Providing this regular social security income to many millions of families that might otherwise have been unable to provide for themselves is not only vital to their welfare, it is also important in protecting society from the many evils bred by widespread poverty. In addition, the benefits paid under the program provide an assured source of purchasing power, in bad times as well as good times, and thus have an important stabilizing effect on our economy.

The program also reinforces the American traditions of independence and self-help. It provides the way for a person to earn his future security as he earns his living. He pays toward the cost of his protection out of his earnings. Since a person's right to benefits does not depend on his current need but arises out of his past work, and since the benefit amount is related to earnings, the program is in line with our system of incentives. Furthermore, since benefits are payable regardless of the person's financial resources, they serve as a base upon which he is encouraged to build additional income protection for himself and for his family.

Thus, by providing a continuing income for workers and their families when earnings are cut off or greatly reduced by retirement in old age or are cut off by disability or death, the program increases the social and economic stability of our society, and it does this in a way that enhances the dignity and self-reliance of the people whose lives it touches. Because it has this tremendous social and economic impact on the American people, the program cannot be allowed to remain static. It must be responsive to the needs of the people in the face of changing social and economic conditions.

If the program were allowed to remain static—for example, if benefits were not increased as wages, prices, and levels of living increase—it could not fulfill the role intended for it. In reporting on the bill that created the program in 1935, the Committee on Ways and Means of the House of Representatives spoke of benefits “. . . in amounts which will insure not merely subsistence but some of the comforts of

life . . ."; and the Committee on Finance of the Senate spoke of benefits ". . . which will provide something more than merely reasonable subsistence. . . ." Although benefit increases and other improvements made over the years, reflecting changes in the economy and experience with the program, have gone a long way toward fulfilling this promise of security to the American people, much remains to be done.

The Congress has recognized the need for periodic re-evaluation and improvement in the program and has given the Secretary of Health, Education, and Welfare responsibility (section 702 of the Social Security Act) for "studying and making recommendations as to the most effective methods of providing economic security through social insurance, and as to legislation and matters of administrative policy concerning old-age pensions . . . and related subjects." The effectiveness of the Department in carrying out this statutory duty is dependent to a large degree on research designed to evaluate the effectiveness of the protection provided by the program and to identify new trends and problems. There are now under way several major studies designed to supply basic information about the adequacy of present provisions and to point up areas in which provisions need to be strengthened.

Unmet Needs

HEALTH INSURANCE FOR THE ELDERLY

A serious shortcoming in the protection afforded by the present program is the failure to protect the elderly against the tragic hardships resulting from expensive illness. In 1935 the great need of the aged was for income loss protection; the great need today is for protection against the cost of health care. More people are living longer and so more people are exposed to the risk of the diseases that attack the aged. In 1935, there were 7.8 million people aged 65 and over (6.1 percent of the total population). By 1962 the aged numbered 17.4 million (9.3 percent of the population). Improved techniques and facilities for providing health care are expensive. Since 1935, hospital charges have gone up 500 percent; during the same period, the cost of living has risen 200 percent.

While the cash social security benefits go a long way in helping to meet regular and recurring expenses like food, clothing, and rent, the impact of health costs varies greatly from month to month and even from year to year. A person over 65 may have no appreciable health costs for several years and then in a short time have health costs running into thousands of dollars, costs that often mean financial disaster. And the problem of meeting high health care costs is one

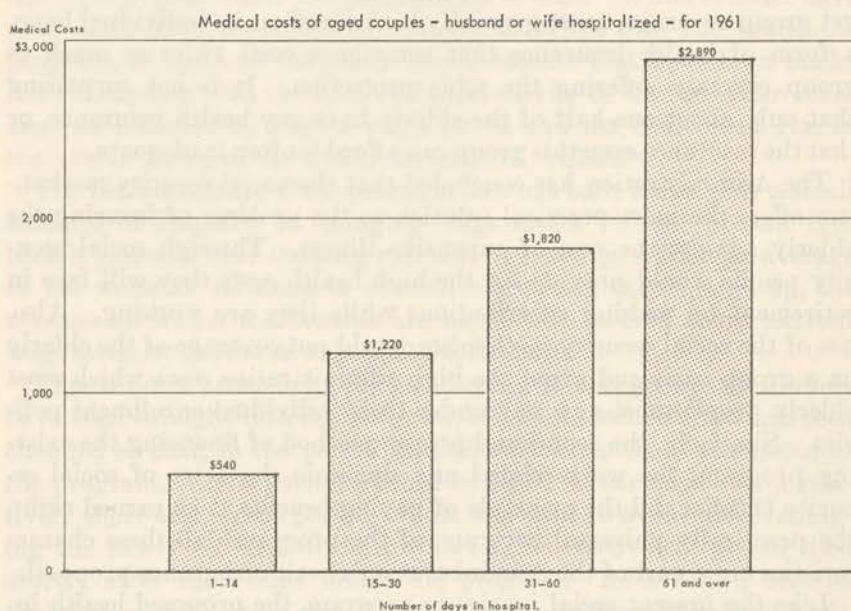
that confronts virtually all aged people—not just the very poor. (Chart 2.)

Cash social security benefits, even when supplemented by other retirement income and savings, clearly cannot be expected to meet the costs of an expensive illness. Obviously, it would not be possible to increase cash social security benefits sufficiently to cover the large health care expenses that many aged people incur.

While necessary for filling certain gaps, public assistance cannot be a good primary basis for financing the health needs of the elderly; an assistance program is designed primarily to meet the problem of dependency after it occurs. Also, public assistance is seriously handicapped in meeting the medical care needs of even the very poor because of the inadequacies of State financing. During fiscal year 1962, four high-income States accounted for about 90 percent of the payments made under the medical assistance for the aged provisions of the 1960 public assistance legislation.

When confronted with a risk to which all are subject but which falls unevenly on those exposed, it is only natural to turn to insurance for protection. Unfortunately, the elderly have not been able to protect themselves adequately through the existing health insurance arrangements as younger people have. The biggest obstacle is simply that most older people cannot afford adequate health insurance. In

CHART 2.—WHEN HOSPITALIZATION BECOMES NECESSARY, MEDICAL COSTS FOR THE AGED RUN HIGH

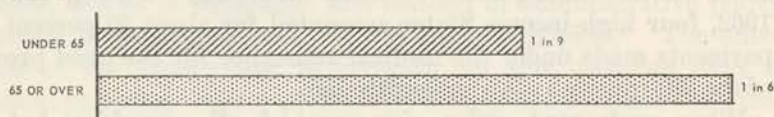


Source: 1957 OASI Beneficiary Survey, adjusted for increases in medical care prices.

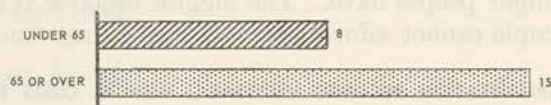
1960, the average income of aged couples in this country was only about \$2,500—less than one-half the average income of younger couples. For aged people living alone, the average annual income was about \$1,050 a year as compared with about \$2,570 for younger people living alone. There are, of course, other factors that put adequate health insurance out of reach of most of the aged. Their above-average hospital use results in high health costs which tend to make health insurance much more expensive for the aged than for younger people. (Chart 3.) Also, the aged, unlike working people who can

CHART 3.—OLD PEOPLE GO TO THE HOSPITAL MORE OFTEN AND STAY LONGER THAN YOUNGER PERSONS

RATIO OF PERSONS HOSPITALIZED DURING A YEAR



AVERAGE DAYS IN HOSPITAL PER PATIENT



get group coverage, must generally be insured on an individual basis, a form of health insurance that sometimes costs twice as much as group coverage offering the same protection. It is not surprising that only about one-half of the elderly have any health insurance, or that the insurance even this group can afford is often inadequate.

The Administration has concluded that the social security mechanism offers the most practical solution to the problem of insuring the elderly against the cost of expensive illness. Through social security people would provide for the high health costs they will face in retirement by making contributions while they are working. Also, use of the social security mechanism would put coverage of the elderly on a group basis and avoid the high administrative costs which most elderly people must now pay under their individual enrollment policies. Similarly, the sound and proven method of financing the existing program, the work-related and dynamic character of social security benefits and the principle of paying benefits as an earned right, the practically universal coverage of the program—all these characteristics are a part of the Administration's health insurance proposal.

Like the present social insurance program, the proposed health in-

insurance program would not provide more than basic protection. Since for the aged who need medical care the heaviest financial burden generally falls upon those needing hospitalization, it was concluded that insurance against the cost of hospital care was the proper point of concentration. As in the case of the present retirement, survivors, and disability benefits, the individual could build on his basic social insurance protection and by his own means obtain protection against the cost of physicians' services, drugs, and other health needs that would not be covered under the proposed plan. And, like the present cash benefits program, the proposed health insurance program would depend upon public assistance to fill in the gaps that would remain. In fact, with a health insurance program for the aged, the financial problems faced by the States in their efforts to aid the aged with their medical costs would be greatly reduced; and it seems reasonable to expect that the States would be able to move toward a more effective health care program for the aged who would still need help in meeting their health care costs. Thus, the proposal would carry on the threefold attack against indigency in old age that has been so successful in the area of income maintenance—an attack carried out by social insurance, voluntary insurance, and public assistance—all working in partnership.

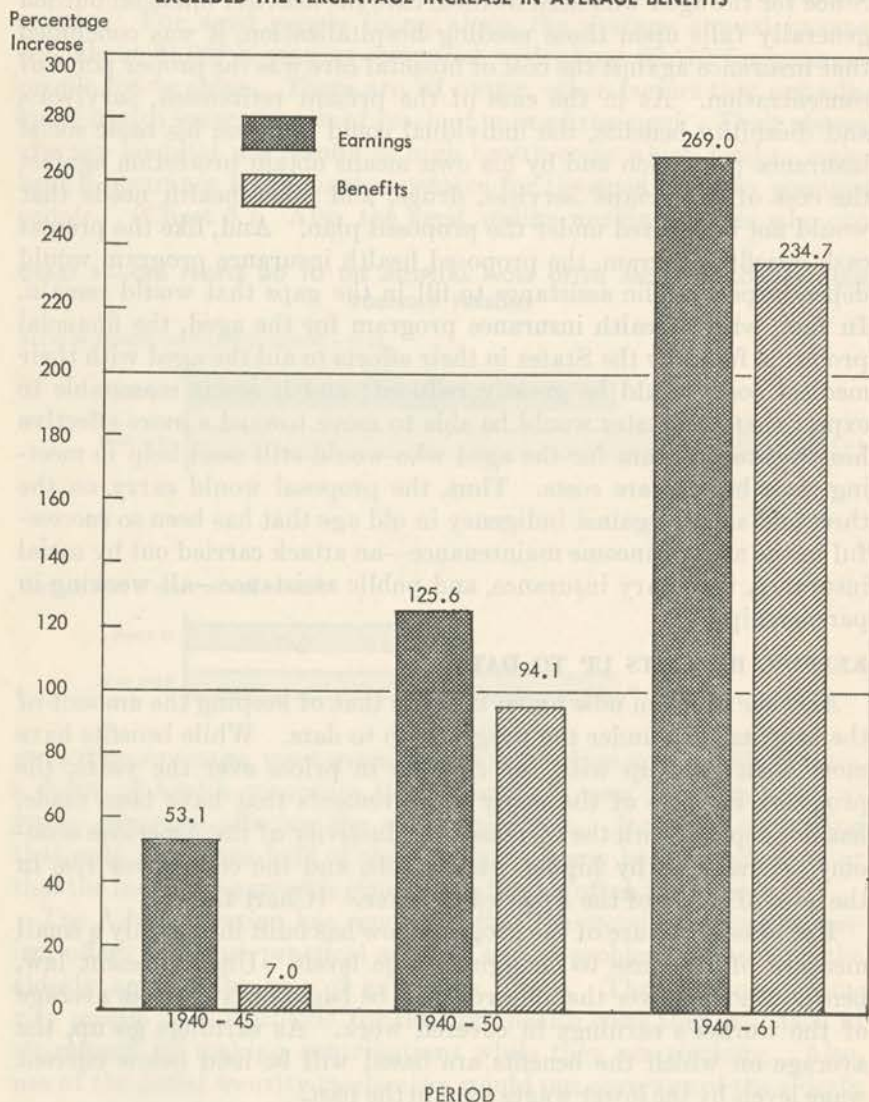
KEEPING BENEFITS UP TO DATE

Another problem now under study is that of keeping the amount of the benefits paid under the program up to date. While benefits have more than kept up with the changes in prices over the years, the program, in spite of the many improvements that have been made, has not kept up with the increased productivity of the American economy, as reflected by higher wage levels, and the consequent rise in the level of living of the American worker. (Chart 4.)

The basic structure of the program now has built into it only a small measure of response to changing wage levels. Under present law, benefit amounts over the long run will be based on a lifetime average of the worker's earnings in covered work. As earnings go up, the average on which the benefits are based will be held below current wage levels by the lower wages paid in the past.

This is not a problem at present because as new groups of workers have been brought into the program, the social security law has been changed so that, in the period immediately after these extensions of the program, benefit amounts could be based on earnings over a relatively short and recent period. This was done to avoid disadvantaging the newly covered workers who reached retirement age or died shortly after they came under the program. As a result, benefits awarded over the past decade have generally been based on fairly

CHART 4.—BETWEEN 1940 AND 1961 THE PERCENTAGE INCREASE IN AVERAGE EARNINGS EXCEEDED THE PERCENTAGE INCREASE IN AVERAGE BENEFITS



current wage levels. In 1961, for example, most of the benefits awarded were related to an average of no more than the worker's highest 5 years of earnings after 1950; benefits awarded in 1962 were typically related to no more than the highest 6 years. Unless the law is changed, though, retirement benefits will eventually be based on a person's average earnings over virtually all of his working life and the generally higher earnings level at the time of retirement will be offset by lower earnings in earlier years.

Various ways in which benefits reasonably related to fairly current earnings could be provided, including the costs that most such plans involve, are being studied. Providing a benefit that is based on reasonably current earnings at the time it is awarded, though, will not, in itself, ensure the adequacy of benefits as wages and prices go up. The worker who retires today may still be living—and depending primarily on his social insurance benefit—10, 20, or even 30 years hence. The adequacy of his benefit will depend on whether it keeps pace with changes in the economy after he retires. This involves more than merely adjusting his benefits so that they will retain their original purchasing value. During this period of his retirement not only the price level but also the average level of living in the United States undoubtedly will rise.

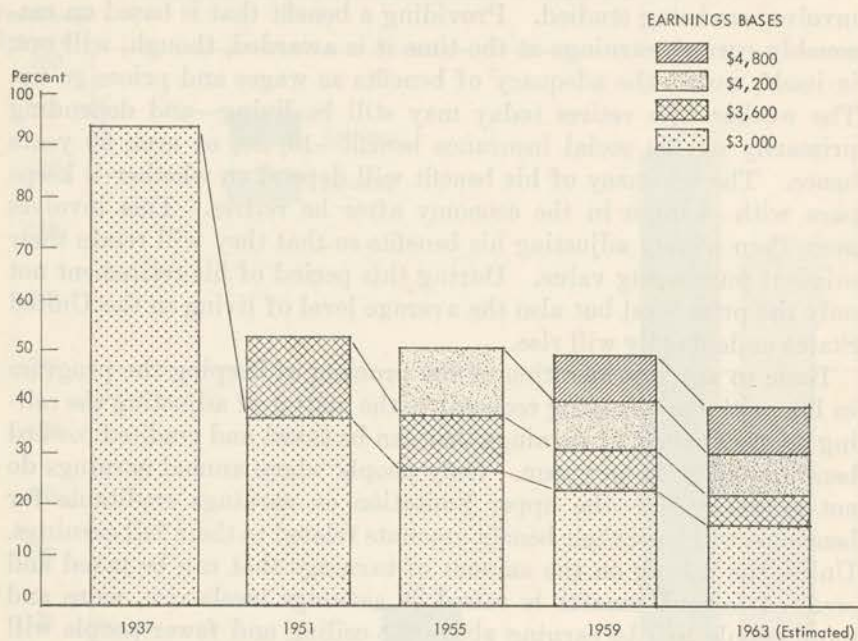
Basic to any consideration of the problem of keeping the program in line with the changing economy is the matter of adjusting the ceiling on the amount of earnings that can be taxed and credited toward benefits under the program. Only people whose annual earnings do not exceed \$4,800—the upper limitation on earnings creditable for benefits—will have their benefit amounts related to their full earnings. Unless the ceiling on the amount of earnings that can be taxed and credited toward benefits is raised as earnings levels rise, more and more people will be earning above the ceiling and fewer people will have their benefit amounts related to their total earnings. In 1938, when the ceiling was \$3,000, about 94 percent of all regularly employed men had all their earnings taxed and counted toward benefits. In 1963, despite three increases in the ceiling since 1938, only about 39 percent of such workers will have all of their earnings taxed and counted toward benefits. (Chart 5.) While it is generally agreed among responsible individuals and groups who have studied the question that the ceiling does have to be raised from time to time as earnings go up, there have been differences of opinion on the amount and timing of increases.

There is also a question of how these adjustments to keep the benefit structure of the program in line with changes in the economy should be made—that is, should automatic changes in benefits and the benefit base be provided for or should we continue to depend on periodic amendments to keep the program up to date? Some foreign systems have adopted provisions of the former kind, and the desirability and feasibility of adopting some automatic method of adjustment in this country is now under study.

EXTENSION OF PROGRAM COVERAGE

Also under study are the problems of extending coverage under the program to those who are still without its protection. Today about

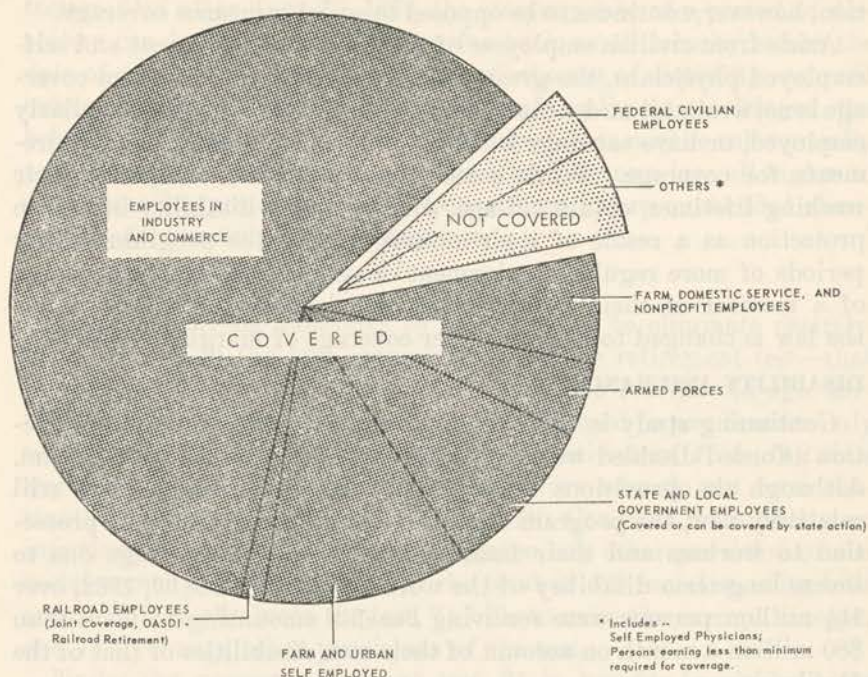
CHART 5.—THE EARNINGS BASE COVERS THE TOTAL ANNUAL EARNINGS OF A SMALLER PERCENTAGE OF REGULARLY EMPLOYED MEN THAN IN THE PAST*



9 out of 10 workers are covered. But there are still gaps in the coverage of the program. The desirability of extending the protection of the old-age, survivors, and disability insurance program to virtually all regular workers of the Nation and their families has been recognized ever since the establishment of the program, and coverage extension proposals have received active consideration and support by the Congress and this Department. To the extent that progress is made toward permitting everyone employed with some degree of regularity to earn protection under the program, more and more workers and their families will of course obtain the valuable protection of the old-age, survivors, and disability insurance program and can look forward to benefits that are related to the level of past earnings from practically all gainful work.

The largest group of workers still without social security coverage are the more than 2 million civilian employees of the Federal Government who are covered under Federal staff retirement programs. (Chart 6.) Many of these Federal employees switch once or more between the Federal service and work outside the Government, with the result that their retirement, survivor, and disability protection depends largely on chance. Some ultimately qualify for benefits under

CHART 6.—9 OUT OF 10 WORKERS ARE COVERED UNDER THE OASDI PROGRAM



both a Federal staff retirement program and the old-age, survivors, and disability insurance program. Many others qualify under one program or another for benefits that reflect only part of their working lifetime and thus provide inadequate protection. Some fail to qualify under any program.

If their employment with the Federal Government were covered by social security, people who spend part of their working lives in Federal employment would be assured of retirement, survivors, and disability insurance that would follow them as they shift from one job to another. Social security coverage for Federal employees, supplemented by coverage under a staff retirement program, would provide them with protection comparable to that afforded many workers in private industry, employees of State and local governments, and members of the uniformed services. This improved protection can be furnished without impairing in any way the independence of the Federal staff retirement programs and without undue cost to employees of the Government or the Government itself.

Self-employed physicians are also excluded from social security coverage. Many self-employed doctors have become aware of the value of old-age, survivors, and disability insurance protection and

many desire coverage. The position of their principal organization, however, continues to be opposed to social insurance coverage.

Aside from civilian employees of the Federal Government and self-employed physicians, the great majority of workers for whom coverage is not available under the Federal law are those who are irregularly employed, or have earnings which do not meet the minimum requirements for coverage. While some of these workers will, over their working lifetimes, obtain old-age, survivors, and disability insurance protection as a result of their coverage under the program during periods of more regular employment or on the basis of the coverage of a member of their family, many will have no protection unless the law is changed to provide wider coverage of marginal workers.

DISABILITY INSURANCE

Continuing study is being made of the effectiveness of the protection afforded disabled workers and their families under the program. Although the provisions for disability insurance benefits are still relatively new, the program now provides a large measure of protection to workers and their families against loss of earnings due to severe long-term disability of the worker. As of June 30, 1962, over 1¼ million persons were receiving benefits amounting to more than \$80 million a month on account of their own disabilities or that of the family earner.

During the fiscal year definite progress was made in improving procedures and plans for obtaining more comprehensive evidence relating to the medical and vocational limitations of claimants. The Social Security Administration has also been developing more effective techniques for giving due weight to vocational and other non-medical factors in evaluating disability. Regulations to this effect are being expanded.

There remain several significant gaps in the protection provided by the disability provisions. For example, some workers are totally disabled over many months or even several years but cannot receive benefits for themselves or their families only because their disability is one from which they may be expected to recover.

Another gap in the protection afforded disabled persons is represented by wives and widows who are totally disabled before reaching age 62. These disabled wives and widows cannot qualify for any benefits under the present law unless they have a child in their care, although they are, of course, in much the same position as those aged 62 and over. Benefits are payable at age 62 to wives and widows without children because it seems reasonable to assume that at age 62 a large number of persons, for health or other reasons, may no longer be able to support themselves by working.

Under present law, in the case of applications for disability protection filed after June 30, 1962, the starting date of a period of disability can be established only as far back as 18 months before the date of application, even though the actual onset of disability occurred much earlier. As a result, where filing of application is delayed, the benefits of disabled workers and their dependents may be substantially reduced, and some workers and their families may lose all rights to social security protection. The Department has recommended elimination of the restriction in present law.

THE RETIREMENT TEST

There are strong pressures to liberalize, or to eliminate entirely, the provision in the law—generally called the retirement test—that is designed to assure that the funds available for the old-age, survivors, and disability insurance program are used to pay benefits only to people who meet a reasonable test of retirement from full-time work and to their dependents and survivors who do not have substantial earnings from work. In the 87th Congress more bills were introduced on the retirement test than on any other provision of the social security law. Included in the total of 629 social security bills are 32 bills to eliminate the test, 71 bills to raise the exempt amount, and 15 to change other provisions of the test.

Under the present retirement test, \$1 in benefits is withheld for each \$2 of annual earnings between \$1,200 and \$1,700 and for each \$1 above \$1,700 (except that benefits are not withheld for any month in which the beneficiary neither earned wages of more than \$100 nor rendered substantial services in self-employment, regardless of the amount of his annual earnings). The present test is a decided improvement over the test in effect before 1961, because it adjusts benefits in proportion to the amount of earnings above \$1,200, thus reducing the deterrent to work and removing certain inequities that existed under the previous test. Under the present test, a beneficiary will always have more combined income from work plus benefits if he earns between \$1,200 and \$1,700 than if he earned only \$1,200. However, there is no incentive, and even some deterrent, for a beneficiary to earn above \$1,700 (unless he earns a good deal more than \$1,700), since for every \$1 in taxable earnings above \$1,700 he loses \$1 in *tax-exempt* benefits.

It is, of course, desirable that the test be framed so as not to discourage beneficiaries from working. On the other hand, it does not seem desirable to use the limited funds of the program to provide benefits for people who have not suffered a loss of work income. An ideal retirement test for the old-age and survivors insurance program would be one that would not deter any retired person from seeking

an opportunity to do all the work he wants to do and would also prevent the payment of benefits to people who are not retired but are working full time at their regular jobs after the age at which benefits are payable. Unfortunately, it is not possible to devise a test which in all respects meets both of these criteria. A test which included an annual exempt amount of more than \$1,200 would allow people to do more work and still get all of their benefits for the year, but raising the exempt amount would be relatively costly and would result in paying benefits to additional people who had not suffered any reduction in earned income. Raising to \$2,400 the present \$1,700 limit on the area in which the \$1-for-\$2 reduction applies would improve incentives for older people to work, at a considerably smaller cost. No doubt the retirement test will continue to be an important area of concern to the Department, to Congress, and to the public.

OTHER OBJECTIVES

Another proposal now under consideration would cover tips as wages for social security purposes. Because tips are generally not counted as wages under the program, employees who receive a sizeable part of their work income in the form of tips have only partial protection. As a result, their benefits do not reflect their true level of earnings. The Department of Health, Education, and Welfare and the Department of the Treasury have recommended a plan to provide that tips received by an employee in the course of his employment, whether paid over to the employee by his employer or received directly from a person other than the employer, be considered wages for purposes of the old-age, survivors, and disability insurance program and for income tax withholding.

These are only some of the major projects now under way; many others are in various stages of development. In addition, numerous problems and proposed program changes of a minor and technical nature are always under study.

What the Program Is Doing

BENEFICIARIES AND BENEFIT AMOUNTS

During the fiscal year ended June 30, 1962, benefits paid under the old-age, survivors, and disability insurance program totaled \$13,669 million—an increase of \$1,781 million over the amount paid in the preceding fiscal year. Benefit payments to disabled workers and their dependents were 44 percent higher than in fiscal year 1960-61 and totaled \$1,011 million. Old-age and survivors insurance monthly benefits rose 13 percent to \$12,484 million and lump-sum death payments amounted to \$174 million, about \$7 million higher than in the previous fiscal year.

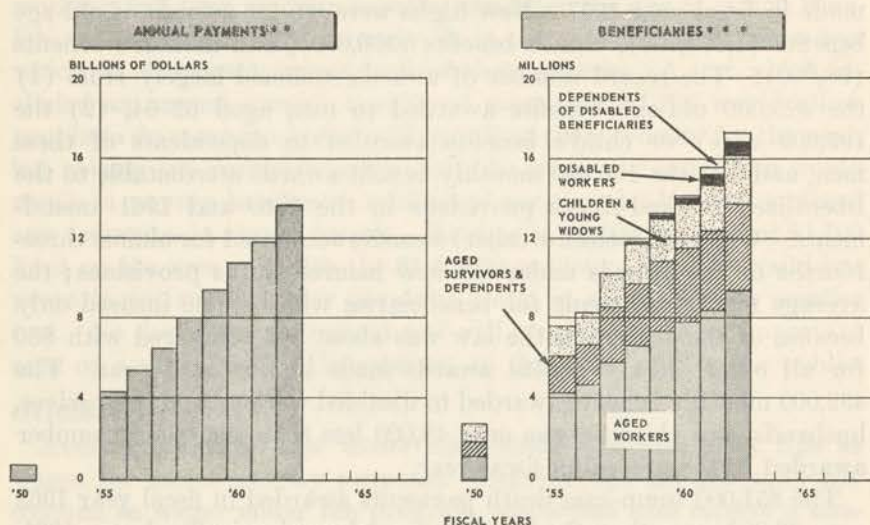
About 3.2 million monthly benefits were awarded in fiscal year 1962, almost half a million more than the previous record number made in fiscal year 1957. New highs were set for awards of old-age benefits (1,490,000), child's benefits (590,000), and mother's benefits (98,000). The record number of awards stemmed largely from (1) the 525,000 old-age benefits awarded to men aged 62-64, (2) the 195,000 wife's or child's benefits awarded to dependents of these men, and (3) the 169,000 monthly benefit awards attributable to the liberalized insured-status provisions in the 1960 and 1961 amendments. Old-age (retired-worker) benefits accounted for almost three-fourths of the awards under the new insured-status provisions; the average monthly amount for beneficiaries who became insured only because of the change in the law was about \$43 compared with \$80 for all other old-age benefit awards made in the fiscal year. The 492,000 monthly benefits awarded to disabled workers and their wives, husbands, and children was only 48,000 less than the record number awarded in the preceding fiscal year.

The 851,000 lump-sum death payments awarded in fiscal year 1962 were 26,000 more than the previous record number in fiscal year 1961. About 823,000 deceased workers were represented in the awards. The average lump-sum amount per worker was \$211.43, about a dollar higher than the average for the preceding year.

The number and amount of monthly benefits in current-payment status increased sharply during fiscal year 1962. The number of monthly benefits went up nearly 1.7 million (11 percent)—294,000 more than the increase in fiscal year 1961—and the monthly rate of payment rose \$136.1 million (14 percent). The growth in the number of beneficiaries produced most of the increase in the monthly rate. Other factors were the provisions in the 1961 amendments which raised the minimum monthly benefit and increased benefits for most aged survivors. At the end of June 1962, about 17.3 million beneficiaries were receiving benefits at a monthly rate of \$1,128.2 million. A year earlier, monthly benefits totaling \$992.0 million were going to 15.6 million beneficiaries. (Chart 7.)

At the end of June 1962, about 13.5 million persons aged 62 or over were receiving old-age and survivors insurance monthly benefits—1.2 million more than in June 1961. Old-age (retired-worker) benefits were going to 69 percent of the aged group, wife's or husband's benefits to 17 percent, widow's or widower's to 13 percent, and the remainder—primarily parent's benefits—to less than one-half of 1 percent. An increase of 351,000 for the 12 months brought the number of mothers and children receiving monthly benefits to 3.1 million. Disabled-worker beneficiaries under age 65 numbered 679,000, an increase of 121,000.

CHART 7.—BOTH BENEFIT PAYMENTS AND NUMBER OF BENEFICIARIES HAVE INCREASED RAPIDLY SINCE 1950*



*The 1950 amendments made major improvements in the program.

**Payments in fiscal year. Includes a small percentage of lump-sum death payments.

***Beneficiaries on the rolls at the end of the fiscal year.

In June 1962, the average old-age benefit being paid to a retired worker who had no dependents also receiving benefits was \$72.40 a month. When the worker and his wife were both receiving benefits, the average family benefit was \$127.10. For families composed of a disabled worker, his young wife, and one or more children, the average was \$191.70, and for families consisting of a widowed mother and two children the average benefit was \$191.40. The average monthly benefit for an aged widow alone was \$65.40 in June; the rise of \$7.20 from the average at the end of June 1961 resulted mainly from the higher rate provided by the 1961 amendments. Among beneficiaries on the rolls at the end of June 1962 whose benefits were based on earnings after 1950, the average family benefits being paid were \$79.90 for a retired worker with no dependents receiving benefits, \$135.20 for an aged couple, \$200.70 for a disabled worker, his young wife, and one or more children, \$212.70 for a widowed mother and two children, and \$76.50 for an aged widow alone. At the end of June 1962, about 73 percent of all retired-worker families were receiving benefits based on earnings after 1950.

DISABILITY PROVISIONS

During the fiscal year, a period of disability was established for about 245,000 workers, 25,000 more than the previous record number in fiscal year 1960-61. About 26,500 disabled persons aged 18 or over

who had applied for child's monthly benefits were found to have a disability that began before they were 18 years of age; the number was about 4,500 greater than in 1960-61. Since the beginning of the program, about 1,450,000 persons have been found to meet the disability requirements under the law.

The number of disabled workers receiving monthly benefits rose 22 percent in the fiscal year and reached 679,000 at the end of June. Almost 473,000 benefits were being paid to the wives, husbands, and children of these beneficiaries—a 39 percent increase. By the end of June 1962 child's monthly benefits were being paid at a monthly rate of \$6.2 million to 135,000 disabled persons aged 18 or over—dependent sons or daughters of deceased, disabled, or retired insured workers—whose disability began before age 18. About 15,000 women—who would not otherwise be eligible for benefits—were receiving wife's or mother's benefits as the mothers of disabled persons receiving child's benefits.

A preliminary estimate indicates that by the end of June 1962, about 150,000 persons were receiving old-age benefits that had been increased by an average of \$8 a month because their social security records were frozen for periods while they were disabled before reaching retirement age. About 55,000 wives, husbands, and children of retired workers and about 85,000 widows, widowers, children, and parents of workers who had their social security records frozen before death were also receiving larger monthly benefits because of the freeze. For the same reason, lump-sum death payments in fiscal year 1962 based on the earnings records of almost 24,000 deceased workers were increased by an average of about \$24 per worker.

THE PROTECTION PROVIDED

At the beginning of 1962, more than 89 million people had worked long enough in covered employment to be insured for benefits under the program (53 million of them permanently insured so that they could get benefits even if they had no more covered work). Of the population under age 65, an estimated 80 million were insured at the beginning of the calendar year. Some 44 million of these people were permanently insured—that is, whether or not they continue to work in covered jobs, they will be eligible for benefits when they reach retirement age, and their families are protected if they die. (Included in this total were about 1.8 million men and 1.1 million women aged 62-64 who were already eligible for old-age benefits but on a reduced basis.) The remaining 36 million were insured but must continue in covered work for an additional period to be insured permanently. Nine out of 10 mothers and young children in the Nation can count on receiving monthly survivors insurance benefits if the

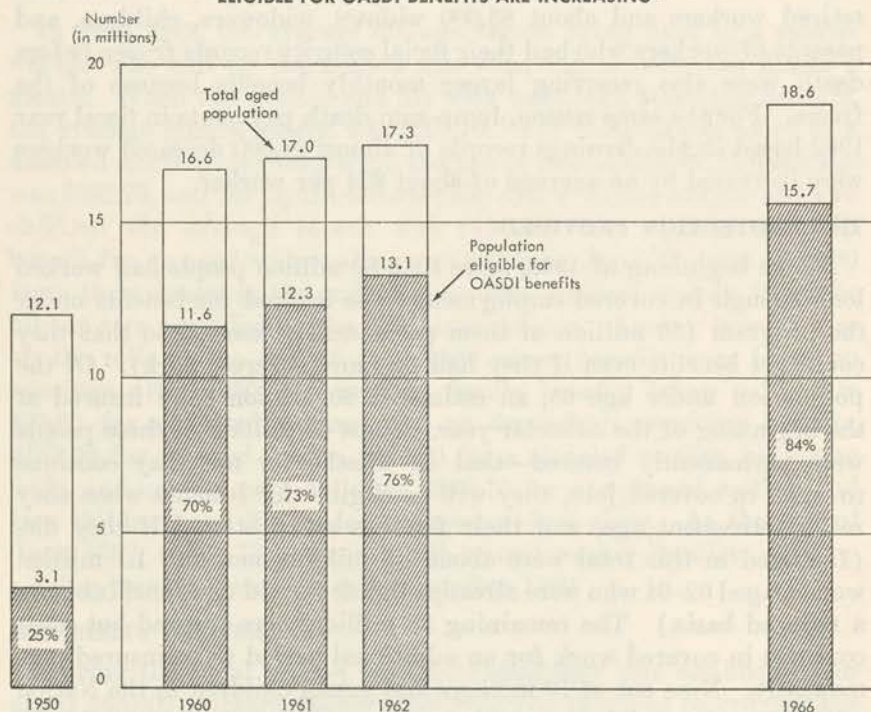
family breadwinner should die. An estimated 51 million of the insured persons under age 65 also met the insured status requirements for protection against the risk of long-term and severe disability.

Of the 17.3 million people aged 65 or over in the United States at the beginning of 1962, 76 percent were eligible for benefits under the program. (Chart 8.) Sixty-seven percent were actually receiving benefits, and 9 percent were not receiving benefits because they or their husbands were receiving substantial income from work. The percentage of eligible aged persons is expected to rise to 84 by the beginning of 1966.

INCOME AND DISBURSEMENTS

Expenditures from the Federal Old-Age and Survivors Insurance Trust Fund during the fiscal year totaled \$13,259 million, of which \$12,658 million was for benefit payments, \$350 million for transfers to the railroad retirement account and \$251 million, including Treasury Department costs, for administrative expenses. Total receipts were \$11,985 million including \$11,455 million in net contributions and \$530 million in interest on investments. Disbursements exceeded re-

CHART 8.—THE NUMBER AND PERCENTAGE OF POPULATION AGED 65 AND OVER ELIGIBLE FOR OASDI BENEFITS ARE INCREASING*



*Figures as of January 1.

ceipts by \$1,274 million, the amount of the decrease in the trust fund during the year. At the end of June 1962 this fund totaled \$19.6 billion.

Total assets of the old-age and survivors insurance trust fund, except for \$1,191 million held in cash, were invested in United States Government securities as required by law; \$3.4 billion was invested in public issues (identical to Treasury securities owned by private investors), and \$15.1 billion was invested in securities of varying maturities issued for purchase by the trust fund. The average interest rate, figured on the coupon rate and face amount of all investments of this fund at the end of the fiscal year, was 2.87 percent.

Expenditures from the Federal Disability Insurance Trust Fund during fiscal year 1962 totaled \$1,086 million, of which \$1,011 million was for benefit payments, \$11 million for transfers to the railroad retirement account, and the remainder—some \$64 million—for administrative expenses. Total receipts were \$1,088 million, including \$1,021 million in net contributions and \$67 million in net interest on investments. Receipts exceeded disbursements by \$2 million, the amount of increase in the fund during the year. At the end of June 1962, the fund totaled \$2,507 million. (Contributions to this fund first became payable in January 1957 and benefit disbursements began in August of that year.)

Assets of the disability insurance trust fund consisted of \$2,407 million in United States Government securities and a cash balance of \$101 million. The invested assets consisted of \$102 million in public issues and \$2,304 million in securities of varying maturities issued for purchase by the trust fund. The average interest rate, figured on the coupon rate and face amount of all investments of this fund at the end of the fiscal year, was 2.94 percent.

Administering the Program

During fiscal year 1962, the Bureau of Old-Age and Survivors Insurance faced two major administrative tasks; processing increased workloads growing out of the 1961 amendments, and continuing its program to improve administration and provide a higher quality of service to the public.

Provisions of the 1961 amendments which added substantially to the Bureau's growing workloads were those which permitted men to become entitled to old-age insurance benefits as early as age 62 with the benefits actuarially reduced to take account of the longer period of payment; liberalized the eligibility requirements and retirement test provisions; and raised the minimum and widows' benefits. The application of electronic data processing to the Bureau's operations

was used to special advantage in implementing the latter provisions, as the benefit rates for about 3.7 million individuals whose benefits were increased by law were converted electronically. In the limited time allowed by the legislation, it would have been impossible to accomplish the conversion without the use of electronic equipment.

The Bureau of Old-Age and Survivors Insurance received a total of 3,438,000 applications for old-age and survivors insurance during the year, plus 659,000 claims for disability insurance benefits. Social security account numbers were established for 3,902,000 persons, and approximately 3,220,000 duplicate account number cards were issued to individuals who had lost their cards or needed new cards for one reason or another. Approximately 264,726,000 earnings items were received from employers or the self-employed for posting to the individual accounts. The district offices handled more than 14,166,000 inquiries about the old-age, survivors, and disability insurance program.

These are massive figures and they indicate why substantial numbers of well-trained employees are necessary to administer the program properly—to pay benefits on time and in the right amount. Bureau staff on duty at the end of the year totaled 33,454, an increase of 2,482 employees during the year. Although there has been a series of significant amendments to the Social Security Act—in 7 out of the last 12 years—which have greatly increased the continuing level of Bureau work and the complexity of the job to be done, the Bureau of Old-Age and Survivors Insurance has demonstrated a capacity to do a larger and more involved job without a proportionate increase in manpower. Although Bureau workloads are more than four times as great as they were in 1950, Bureau staff required to handle these workloads is only some three times as large as in 1950. Thus, 77 employees now perform about the same amount of work as 100 did in 1950. This improvement in productivity has been achieved in spite of the increasing complexity of the program and the necessity of training large numbers of new personnel.

Continuing efforts to improve the quality and timeliness of service to the public set the tone for all endeavors during the year. As an example of these efforts to improve public service, 17 additional district offices were opened in various sections of the country where surveys indicated the most pressing need. The new offices are located in the following cities: White Plains, Flushing, and Freeport, N.Y.; Butler, Pa.; Glen Burnie, Md.; Goldsboro and Greenville, N.C.; Elizabethtown and Campbellsville, Ky.; Cookeville, Tenn.; LaSalle, Ill.; East Liverpool, Ohio; Mt. Pleasant, Mich.; Big Spring, Tex.; Helena, Ark.; Whittier, Calif.; and Hilo, Hawaii. At the end of the fiscal year, the program was being administered through a network of

601 district offices, 11 regional offices, 7 payment centers, and the central headquarters in Baltimore. In addition, public service visits are made on a regular and recurring basis to more than 3,600 communities, in order to bring a personalized service to as large a share of the population as is possible.

A special service initiated during the year was a nationwide campaign to notify through the press, radio, and television all people over 65 who were made eligible for benefits by the 1960 and 1961 amendments but who had so far failed to apply for them. In the latter part of the fiscal year, a program was begun to advise by personal letter those aged insured workers who had not claimed benefits because they were unaware of their entitlement to them. This special program, which is being continued in fiscal year 1963, resulted in the filing, during fiscal year 1962, of almost 38,000 additional claims by workers and their dependents or survivors.

An example of the Bureau's continuing efforts to improve its services to beneficiaries already on the rolls is the special study of beneficiaries aged 85 and over whose numbers have been increasing at a rate of about 40,000 annually. At the beginning of 1961, there were approximately 285,000 such beneficiaries. Because the Bureau's channels of communication with them were limited, a question existed as to the situation of persons in the group. The Bureau, therefore, conducted a nationwide survey during the period from June through September 1961 to determine the extent to which benefit checks might be going to individuals who (1) were in need of a representative payee (i.e., who were incapable of managing their own funds and were in need of someone to receive and expend benefits on their behalf), or (2) had died without their deaths being reported to the Bureau. Personal contact was made with a sample of 1,937 beneficiaries over age 85. The results of the survey indicated that there was no problem of unreported deaths. Nor in any case was evidence found that benefits had been misappropriated or misused by persons responsible for the beneficiaries' monthly checks. There were a number of cases, however, in which the beneficiaries were not capable of handling their own funds and whose inability had not been previously reported. To safeguard benefit rights and to verify the continuing eligibility of this and other groups of beneficiaries, procedures have been developed for a permanent survey program to be conducted on an annual basis.

Late in fiscal year 1962, the Bureau of Old-Age and Survivors Insurance initiated a 14-month pilot project in the State of Maryland to test the design for a nationwide study of the representative payee procedures, under which the benefits of minor children and incapable adults are paid to another person for the beneficiary's use. Data will

be collected concerning the management of the benefit by the payee, the current situation and needs of beneficiaries, and the availability and use of community protective services and welfare facilities. The findings will provide a basis for appraising both the policies governing the selection of representative payees and the procedures for safeguarding the interest of beneficiaries having payees. The nationwide survey is scheduled for late 1963, upon completion of the Maryland pilot project.

During the year, the Bureau successfully completed the installation of its data communications system, which interconnects the district offices, the regional offices, the payment centers, and the central headquarters. This system has made it possible for the Bureau to process and pay insurance claims more rapidly than would otherwise be possible and is an important part of the Bureau's integrated data processing system for the handling of claims and related activities. The use of computers is, likewise, an integral part of this system and, during the year, the processing capabilities of the Bureau were substantially enlarged. The programs developed for these computers have simplified the process of certifying to the Treasury Disbursing Offices the payment of old-age, survivors, and disability insurance benefits, and are replacing statistical operations previously performed on electric accounting machines. The Bureau has further expanded its use of computer facilities by integrating the preparation of the award form with the certification of the earnings record in its claims operations. This process has reduced the clerical effort previously devoted to forms preparation and the manual calculation of benefit amounts, and has reduced errors stemming from manual calculations and transcriptions.

Work to accomplish a total, Bureau-wide integration of claims processing will proceed in fiscal year 1963 with simultaneous and inter-related attention being given to further development of electronic data processing and long-range total systems planning.

A feasibility study was completed for the Bureau of Old-Age and Survivors Insurance in February 1961 by a research team from Johns Hopkins University to determine whether operations research techniques could be profitably applied to processing and organizational problems in the long-range aspects of the Bureau's work. The feasibility study was thoroughly considered during the first half of fiscal year 1962 and, after an analysis of the detailed proposals submitted by six research organizations, a contract was signed on January 30, 1962, with Dunlap and Associates, Inc., Stamford, Conn., for operations research assistance in the Bureau's long-range studies of the claims process. The objectives established for the operations research program are, through use of the highly technical assistance supplied

by the Dunlap firm, to: (1) determine the best size and number of claims review points and the best organizational structuring for claims development, adjudication and review; (2) supplement the Bureau's studies of those aspects of the claims process requiring exercise of sound judgment; and (3) develop within the Bureau a staff capable of employing operations research techniques on a long-range basis. For purposes of the third objective, the Bureau selected five employees to form the nucleus of the internal operations research group. Detailed plans for on-the-job and academic training for the group were developed and initiated. In addition, the trainees are working as research assistants on the project.

Early in fiscal year 1962, the Bureau established a Foreign Claims Branch as a component of the Division of Claims Control, with responsibility for the centralized administration of the old-age, survivors, and disability insurance program abroad. The establishment of this new Branch was prompted by numerous considerations, the most important of which were: (1) the increasing number of beneficiaries who reside abroad; and (2) a number of special problems in this area which have come to the Bureau's attention in recent years. Many areas have been defined in which additional effort to improve Bureau operations abroad is required and in fiscal year 1963 the Bureau will be engaged in the solution of these problems.

The Form SS-5 file of account number applications, record changes, and indicators of claims actions now contains approximately 175 million forms and is growing at the rate of 7,772,000 forms annually. The file now occupies about 40,000 square feet of floor space. Attempts to find a method for converting this file to a more efficient system were continued and, during fiscal year 1962, the Bureau collaborated with systems engineers from seven companies in the development of a film-medium substitute for the Form SS-5 file. Schemes developed by these companies range from sophisticated microfilm systems to video tape processes, with a considerable degree of automation of updating and reference operations. Serious consideration is now being given to each of the proposals for converting the file and it is expected that one system will be adopted if it can be shown conclusively that any increase in cost would be offset by increased efficiency in updating and reference operations.

By agreement between the Department of Health, Education, and Welfare and the Treasury Department, the Bureau of Old-Age and Survivors Insurance has incurred a substantial new workload in the issuance of social security account numbers for Internal Revenue Service identification purposes. This enumeration project for Internal Revenue Service involves the Bureau in four distinct phases. The first phase was concluded on March 30, 1962, and resulted in the proc-

essing of 116,312 applications for account numbers that had been filled out by Federal Civil Service employees. The second phase, started near the end of the fiscal year, will involve the processing of applications for account numbers to be completed by approximately 2 million people who filed 1961 and who will file 1962 income tax returns. The third phase will start in the second quarter of fiscal year 1963 and will involve the processing of approximately 2,750,000 applications for account numbers to be completed by the recipients of dividends, interest, and other income subject to income tax reporting. The last phase of this enumeration project is expected to start in the first half of fiscal year 1964 and will involve those taxpayers and recipients of dividends, interest, etc., who did not obtain account numbers in the earlier phases. Details of this entire project are being developed jointly by the Internal Revenue Service and the Bureau.

In continuing its efforts for greater operating economy and efficiency, the Bureau implemented new and revised procedures and obtained new and improved equipment for its earnings record activities. Two of the Bureau's older computers were replaced by newer models with greater speed and capacity. Experience with this new equipment is extremely gratifying. Under the improved system, a number of programs have been combined to save processing time, to produce the end product at an earlier date, and to take advantage of the greater memory capacity of the newer model. Further improvements in the operations of these new computers were achieved when the newer high speed tape units, which record data at a density of 800 characters to the inch, were placed in operation during the fourth quarter of the fiscal year.

During the year, there was an increase in employers' use of magnetic tape reporting of employees' earnings. By the end of fiscal year 1962, over 4 million employee earnings items per quarter from 28 private companies, 6 State and local governments, and 4 military organizations were being reported on magnetic tape. This method of reporting employee earnings saves time and money both for the Government and for the employers who make use of it.

A total of 258 employers, each having 10,000 or more employees, are currently participating in the Bureau's direct submittal plan (reporting employees' earnings direct to the Social Security Administration rather than through the Internal Revenue Service). As a result, 7,600,000 earnings items are being received early each quarter, thereby enabling the Bureau to get a correspondingly early start on updating individual earnings accounts.

Both the magnetic tape reporting and direct submittal plans have been used only by employers reporting 10,000 or more employees. In fiscal year 1963, the Bureau is planning to extend each of these plans to employers who have between 5,000 and 10,000 employees.

An electronic data processing system for payroll and leave accounting for central office personnel was implemented during the year. The transition to the new system was accomplished in the latter half of fiscal year 1962 in a series of steps, beginning with a data verification and clean-up project, and concluding with a period of parallel operations to verify the accuracy of the new system before discontinuing the old procedures.

Adequate space for Bureau personnel and equipment continues to be a problem, although alleviated somewhat in Baltimore by construction of an Annex (largely completed during the fiscal year) to the Social Security Building. The Annex was ready for occupancy in August 1962 and most of the Bureau personnel located in downtown Baltimore buildings have been moved into the new space. Plans are now being developed to construct a 5-bay enlargement of the Annex, to alleviate further crowded conditions in the Social Security Building and to meet additional space needs. Lack of adequate space for district offices and payment centers remains a serious problem.

Research Activities

In cooperation with the Division of Program Research of the Social Security Administration and the Bureau of the Census, the Bureau of Old-Age and Survivors Insurance participated in the planning and preparatory work for a survey of all persons 62 years of age and over and a companion study of mother-child old-age and survivors insurance beneficiaries. The Bureau of Old-Age and Survivors Insurance is also participating with the Bureau of Family Services in planning or carrying out a number of studies designed to determine: (a) why a significant number of public assistance recipients are not qualifying for old-age, survivors, and disability insurance benefits, and (b) why old-age, survivors, and disability insurance beneficiaries require public assistance.

The Bureau also advanced preparations for a longitudinal study of aged beneficiaries, which is now scheduled to be launched with an initial survey in the spring of 1964. During the year the Bureau released additional analyses based on data from the 1957 cross-section survey of beneficiaries. Data from the 1960 survey of disability beneficiaries and of disabled workers who were awarded a period of disability for benefit computation purposes in the eight largest metropolitan areas were tabulated in preparation for analysis and release of the survey findings.

The Bureau published a monograph on average and aggregate paid manhours of employment of wage workers in covered employment, by industry division.

During the year the Bureau also made progress in its continuing survey of applicants for old-age benefits designed to provide data on, among other things, the factors affecting the worker's decision to apply for benefits.

A study of persons who failed to meet the requirements for a period of disability or disability benefits in 1957, 1958, and 1959 was continued. Reports of findings from this study will be prepared during the coming fiscal year comparing the characteristics and subsequent experience of workers who were denied a period of disability in these years.

The Bureau, in cooperation with the Office of Vocational Rehabilitation, continued its study of the rehabilitation experience of 2,100 disabled persons who were referred by the Bureau to State rehabilitation agencies and who were reported as rehabilitated in 1957-58. A report is scheduled for completion in fiscal 1963.

The Bureau published an analysis of provisions for survivor benefits in private pension plans. Work advanced on an analysis of findings from the Bureau's survey of State and local retirement systems. During the coming fiscal year the Bureau, jointly with the Bureau of Labor Statistics, will continue to develop a program of studies in the private pension and welfare field.

Work on other socio-economic research studies was advanced during the year, including studies of the taxation of income of the aged, and a cohort study of 61,000 men and women wage earners with earnings in 1957 that shows changes in the cumulative employment and cumulative wage credits of these wage earners as they aged from 1937 to 1957.

Financing the Program

The old-age, survivors, and disability insurance system has an estimated benefit cost that is very closely in balance with contribution income. In enacting the 1961 amendments Congress again made clear its intent that the program continue to be self-supporting from contributions of covered workers and employers. Careful review was given to intermediate-range and long-range actuarial cost estimates prepared for use of the congressional committees in their legislative considerations. The program as amended continues to be financed on an actuarially sound basis, both for the next 15 to 20 years and for the distant future.

The difficulties involved in making exact predictions of the actuarial status of a program that reaches into the distant future are widely recognized. If different assumptions as to, say, interest, mortality, retirement, disability, or earnings had been used, different results would have been obtained. Accordingly, no one set of estimates should be looked upon as final, in view of the fact that future experi-

ence may vary from the actuarial assumptions. Nonetheless, the intent that the system be actuarially sound can be expressed in law by a contribution schedule that, according to the intermediate-cost estimate, results in the system being substantially in balance. The Department, in carrying out its policy of continually reexamining the cost estimates of the program, is now conducting a complete review of its cost estimates in the light of the latest information available.

OLD-AGE AND SURVIVORS INSURANCE BENEFITS

The level-premium cost of old-age and survivors insurance benefits after 1961, on an intermediate basis, assuming interest of 3.02 percent and earnings at about the levels that prevailed during 1959, is estimated at 8.79 percent of payroll (after adjustments to allow for administrative expenses and interest earnings on the existing trust fund). The level contribution rate, equivalent to the graduated rates in the law, is estimated at 8.55 percent of payroll, leaving a small actuarial insufficiency of 0.24 percent of payroll. In view of the very long range over which these projections are made, and the many variable factors included, the insufficiency is so small that the system may be considered in actuarial balance.

DISABILITY INSURANCE BENEFITS

The Social Security Amendments of 1956 established a system for financing disability benefits which is entirely separate from the financing of old-age and survivors insurance benefits. The estimated level-premium cost of the disability benefits (adjusted to allow for administrative expenses and interest earnings on the existing trust fund) on an intermediate basis is 0.56 percent of payroll. Contribution income has been specifically allocated to finance these benefits; this income is equivalent to 0.50 percent of payroll, leaving a small actuarial insufficiency of 0.06 percent of payroll. Future experience with this program will be studied carefully to determine whether the actuarial cost factors used are appropriate or if the financing basis needs to be modified.

Summary and Conclusions

The old-age, survivors, and disability insurance program is a major institution in the economic and social life of the Nation. Over the years, this "social utility" has proven to be an effective and efficient method of preventing widespread dependency and want that is in every way consistent with the principles of our free society. If it is to fully realize its potential contribution toward eliminating poverty in our society, though, it can not be allowed to remain static. It must respond to changing conditions and emerging problems. The Depart-

ment of Health, Education, and Welfare will continue carefully to evaluate the effectiveness of the present program and to plan for its improvement. The legislative history of the program gives us every reason to believe that the program will be kept effective and responsive to changing needs and by efficient administration that it will be able to fulfill its promise of security to the American people.

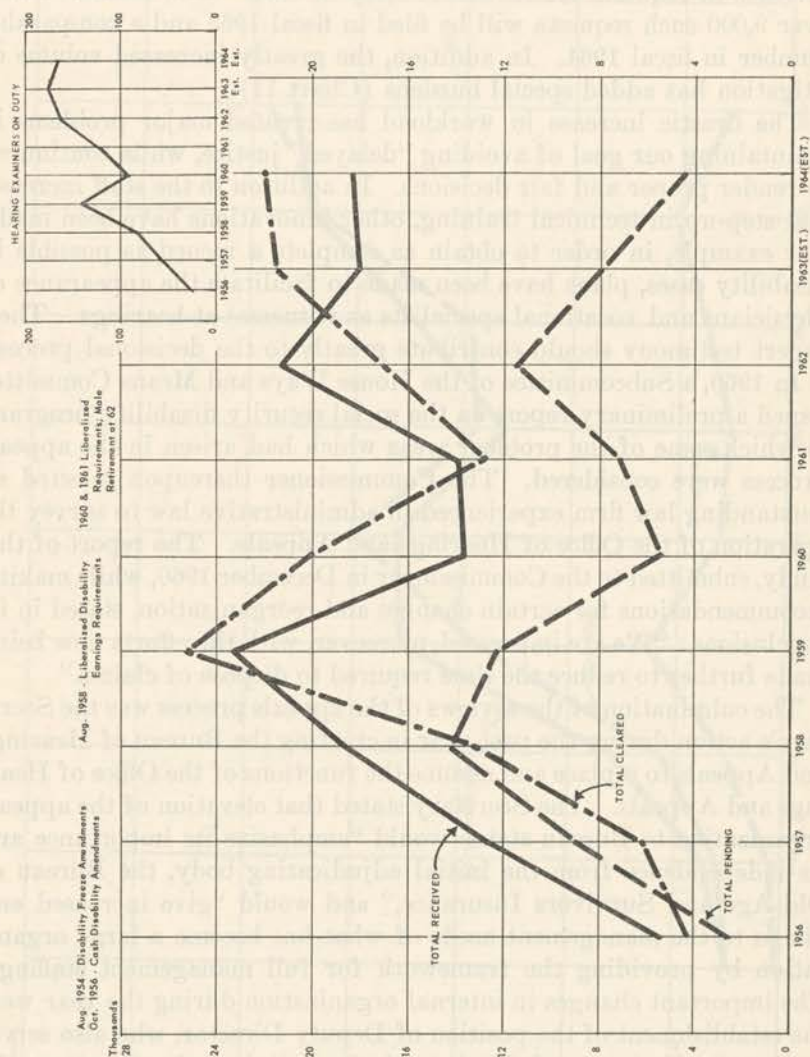
Bureau of Hearings and Appeals

Prior to 1939, when the Bureau of Old-Age and Survivors Insurance denied an application for social security benefits, the determination was final. Recognizing that a claimant who disagreed with such determination was entitled to an opportunity to protect his rights, Congress in that year amended the Social Security Act so as to provide for administrative hearings and judicial review on claims for benefits. To implement that provision there was established within the Social Security Administration an office which was charged with responsibility of conducting quasi-judicial proceedings and issuing decisions which would be subject to review by the courts.

These adjudicative responsibilities are carried out through hearing examiners stationed in the various States and certain territories, and through the Appeals Council sitting in Washington, D.C. The hearing examiners conduct hearings during which the claimant has the right to a representative of his own choosing. Sworn testimony is recorded verbatim by a reporter, documentary evidence is admissible, and oral and written arguments may be presented. After a full record has been made, the hearing examiner issues a written decision which may affirm, reverse or modify the determination of the Bureau of Old-Age and Survivors Insurance. Such decision is subject to full review by the Appeals Council at its option. If the Council decides to review a case it then issues a written decision. Thereafter, a claimant who continues to feel aggrieved may appeal to the courts.

Following enactment of the disability provisions of the Social Security Act, the number of requests for hearings filed by claimants increased sharply until a high of 23,450 was reached in fiscal 1959—an increase of 500 percent over 1955. The number declined in 1960 and 1961; but statutory amendments in those years resulted in 21,400 requests for hearings in fiscal 1962, an increase of 52 percent over the preceding fiscal year (Chart 9). The goal is to afford each claimant a prompt hearing and a decision by the hearing examiner within 90 days thereafter. Efforts to achieve that goal have been made through a substantial increase in the size of the hearing examiner corps, the maintenance of a continuing program of technical training, and the use of such devices as overtime and reassignment of cases.

CHART 9—HEARING REQUESTS: TOTAL RECEIVED, CLEARED, AND PENDING



The tremendous increase in hearing requests has also brought about concomitant increase in the workload of the Appeals Council (Chart 10). Thus, whereas 970 requests for review of hearing examiners' decisions were filed in 1956, the number rose to 7,300 in 1960. After a decline in 1961, new statutory amendments contributed in part to an increase in requests for review to 6,400 in 1962. It is estimated that over 9,000 such requests will be filed in fiscal 1963 and a comparable number in fiscal 1964. In addition, the greatly increased volume of litigation has added special burdens (Chart 11).

The drastic increase in workload has created major problems in maintaining our goal of avoiding "delayed" justice, while continuing to render proper and fair decisions. In addition to the staff increase, and step-up in technical training, other innovations have been made. For example, in order to obtain as complete a record as possible in disability cases, plans have been made to facilitate the appearance of physicians and vocational specialists as witnesses at hearings. Their expert testimony should contribute greatly to the decisional process.

In 1960, a Subcommittee of the House Ways and Means Committee issued a preliminary report on the social security disability program, in which some of the problem areas which had arisen in the appeals process were considered. The Commissioner thereupon selected an outstanding law firm experienced in administrative law to survey the operation of the Office of Hearings and Appeals. The report of this study, submitted to the Commissioner in December 1960, while making recommendations for certain changes and reorganization, stated in its conclusions: "We are impressed, moreover, with the efforts now being made further to reduce the time required to dispose of claims."

The culmination of the reviews of the appeals process was the Secretary's action during the past year in creating the Bureau of Hearings and Appeals to replace and assume the functions of the Office of Hearings and Appeals. The Secretary stated that elevation of the appeals organization to Bureau status would "emphasize its importance and its independence from the initial adjudicating body, the Bureau of Old-Age and Survivors Insurance," and would "give increased emphasis to the management needs of what has become a large organization by providing the framework for full management staffing." The important changes in internal organization during the year were the establishment of the position of Deputy Director, who also serves as Deputy Chairman of the Appeals Council, in order to relieve the Director and Chairman of many responsibilities of administration; the separation of general administrative functions from those relating to field operations, through the creation of the Division of Administration and the Field Division with increased responsibilities; and the expansion of the Program Division.

CHART 10.—REVIEWS BEFORE APPEALS COUNCIL: RECEIPTS, DISPOSALS, AND PENDING

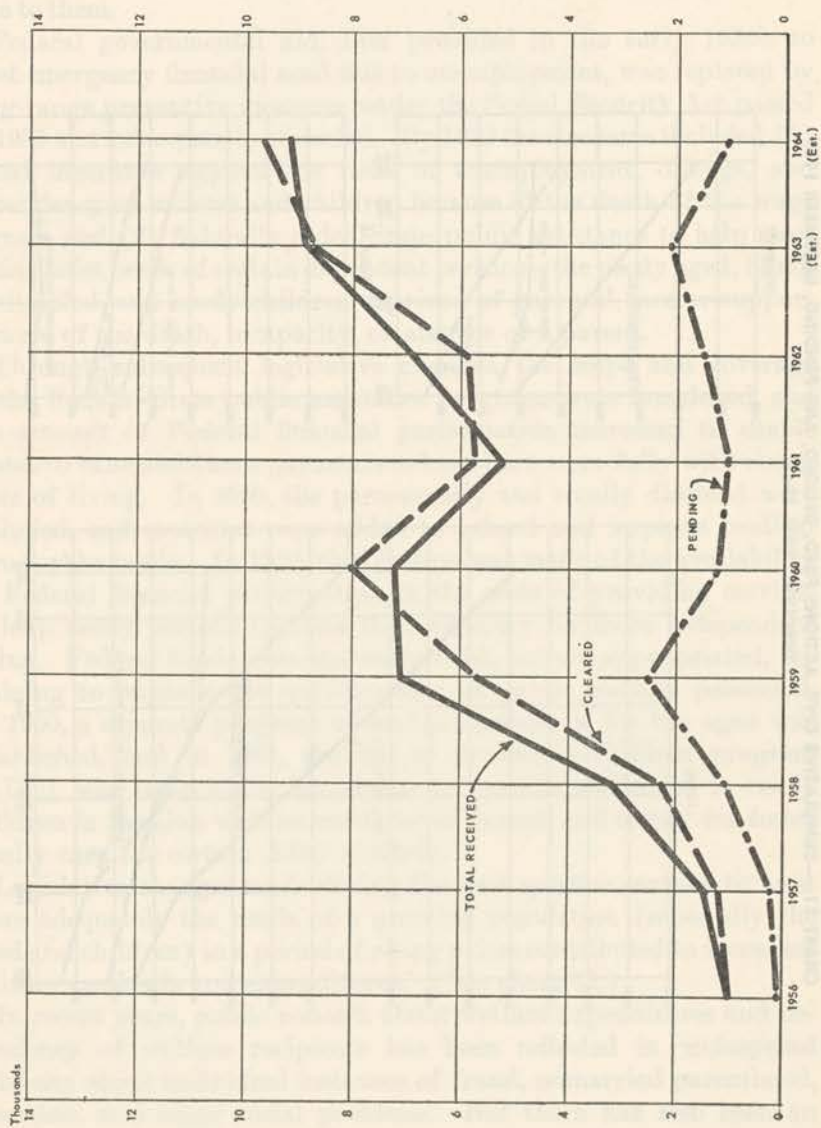
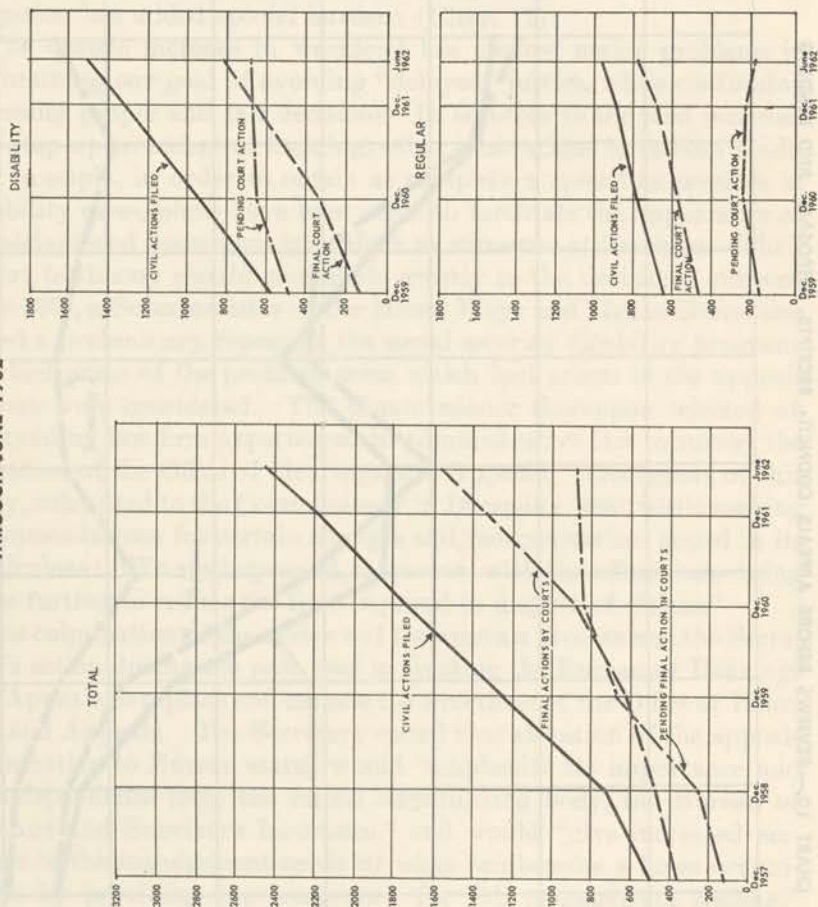


CHART 11.—CUMULATIVE CIVIL ACTIONS FILED, DECIDED, AND PENDING, DECEMBER 1957
THROUGH JUNE 1962



Public Assistance

Public assistance is intended to help individuals and families meet their essential needs when they are unable to do so themselves, and other resources, including social insurance, are not adequate or available to them.

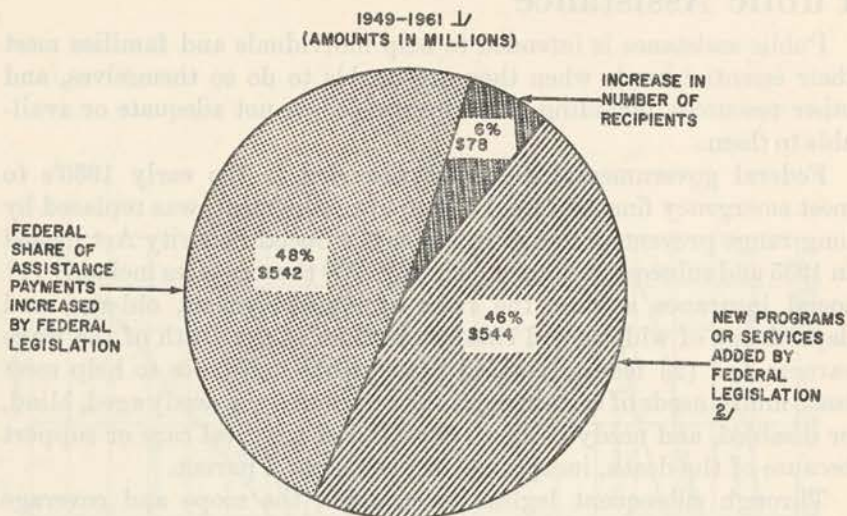
Federal governmental aid, first provided in the early 1930's to meet emergency financial need due to unemployment, was replaced by long-range preventive measures under the Social Security Act passed in 1935 and subsequently amended. By 1950 the measures included (1) social insurance against the risks of unemployment, old-age, and dependency of widows and children because of the death of the wage earner; and (2) federally aided State public assistance to help meet basic unmet needs of certain dependent persons—the needy aged, blind, or disabled, and needy children deprived of parental care or support because of the death, incapacity, or absence of a parent.

Through subsequent legislative changes, the scope and coverage of the Federal-State public assistance programs were broadened, and the amount of Federal financial participation increased to enable States to raise assistance payments to keep pace more fully with rising costs of living. In 1950, the permanently and totally disabled were included, and measures were added to extend and improve medical care for the needy. In 1956, clarification was made of the availability of Federal financial participation in the costs of providing services to help needy persons increase their capacity for more independent living. Federal funds were also authorized, but not appropriated, for training to upgrade the qualifications of public welfare personnel. In 1960, a separate program of medical assistance for the aged was established, and in 1961, the aid to dependent children program (ADC) was temporarily broadened to provide assistance to needy children in families with an unemployed parent, and to pay for foster family care for certain ADC children.

Legislative changes made during the past quarter century to meet more adequately the needs of a growing population (especially the aged and children) in a period of rising prices contributed to increased welfare caseloads and expenditures. (See chart 12.)

In recent years, public concern about welfare expenditures and dependency of welfare recipients has been reflected in widespread publicity about individual instances of fraud, unmarried parenthood, desertion, and other social problems. But there has also been an increasing recognition that the economic need of some groups is a consequence of a healthy, growing industrial society in which technological change and automation have produced economic and social problems with which some individuals, families, and even communities, can no longer cope.

CHART 12.—WHY INCREASED PUBLIC ASSISTANCE EXPENDITURES?



¹ Represents 131 percent increase over 1949.

² Includes \$199 million vendor medical payments in OAA, ADC, and AB; \$166 million in APTD; \$142 million for the adult caretaker in ADC; \$31 million in MAA; \$8 million for Guam, Puerto Rico, and the Virgin Islands; \$7 million for additional State plans; and \$3 million for children of unemployed parents in ADC.

Public concern over rising welfare costs, as well as wide interest in welfare methods and goals, led in 1961 to a concerted departmental effort to find new and better ways of dealing with dependency. Soon after taking office, Secretary Ribicoff announced that improvement of welfare programs would be one of his principal objectives. Early in the year, he sought and received advice and reports from several groups of experts in welfare and related fields on how welfare programs could be more effectively used as a constructive force in preventing and alleviating dependency and other related social problems.

According to Secretary Ribicoff: "What has emerged from this review is a clear recognition of the fact that today in 1961 the outlook of 1935 is not up to date. Born of depression emergencies, the original Federal welfare legislation well met the problems of that time. But the quarter of a century that has passed has taught us many new things. We are not satisfied with our welfare programs, and we know there is much that can be done to improve them. We must move toward two objectives: eliminating whatever abuses have crept into these programs and developing more constructive approaches to get people off assistance and back into useful roles in society."

To accomplish these goals, there was general agreement of the need for: (1) greater emphasis on rehabilitation and family-centered social services; (2) more adequate protection and support of needy children; (3) an administrative structure more helpful to the States in achieving

these objectives, including better qualified public welfare personnel, and methods of dealing more effectively with fraud and location of deserting parents; and (4) increased development and utilization of community resources in dealing with social welfare problems.

Administrative Actions in Fiscal 1962

A substantial start in modifying the public assistance program was made under existing legislative authority in December 1961 when Secretary Ribicoff directed the Commissioner of Social Security to:

change the name of the Bureau of Public Assistance to the Bureau of Family Services to reflect the increased emphasis on family-centered welfare services;

establish a new Division of Welfare Services (absorbing the functions of the former Division of Program Standards and Development) to implement the welfare services emphasis, to assist the States in the development of their services programs, and to study work and training activities and other incentives to employment;

modify existing Federal policy to permit and encourage the States to allow income of children to be conserved for appropriate future needs (such as the costs of education, and training for employment) without deduction from the public assistance payment; and

require State agencies to:

identify needy families with problems such as unmarried parenthood, desertion, and children in other hazardous home situations; and assign such cases to qualified staff for the provision of services, including frequent home visits, and close coordination to assure maximum use of the child welfare staff for consultation and services;

improve staff training and development programs through an assessment of personnel and training needs to carry out the objectives of the proposed family-welfare-service-oriented program;

establish a special unit responsible for locating deserting parents of needy children, assisting law enforcement officers and others in their efforts to require effective discharge of family responsibilities, reuniting families whenever feasible, and obtaining support; and

include in the State plan pertinent points relating to methods, procedures, and placement of responsibility for dealing with instances of suspected fraud, and submittal of periodic reports on the nature and extent of this problem.

In January 1962, Secretary Ribicoff announced the following additional administrative actions:

extension of the earlier policy change allowing conservation of income of ADC children for future educational and training purposes to permit the income of the ADC mother also to be used for this purpose, and identification

of specific steps to be taken by the States to assure that ADC children obtain the full educational opportunities available to them ;

organization of a work group to assist the Department in simplifying and improving welfare forms and procedures, and in eliminating unnecessary paperwork to allow more staff time for work with recipients ;

establishment of a work group to develop further information on the causes of illegitimacy and the most effective methods of dealing with it, to review existing programs to see where further study is needed, to highlight promising areas of research, and to develop programs that will help combat illegitimacy and the economic dependency of children ; and

expansion in the Social Security Administration's research facilities to assure continuing attention to developing and carrying out studies in the broad field of human resources and social welfare, and appointment of a continuing committee to advise on the Department's research planning responsibilities, especially in finding ways to reduce dependency and to stimulate self-care and self-support.

Cooperative effort was also encouraged with the following newly established groups :

the Children's Bureau's special Youth Development Unit, to help local communities plan for improved coordination of welfare services to meet special problems of youth, particularly those on ADC ;

the Office of Education's Youth Development Section, to promote better coordination between school authorities and welfare agencies in working on school problems of children, especially those on welfare rolls, and on the school drop-out problem ;

the Office of Vocational Rehabilitation's task force established to determine what administrative steps can be taken under present law to expand and improve vocational rehabilitation services for disabled persons on welfare rolls ; and

the special committee of deans of schools of social work, to increase the supply of adequately trained personnel for public welfare.

A further policy change announced by the Secretary in March was designed to help mental patients return to community living by permitting Federal financial participation in assistance payments to them or on their behalf on their conditional release from a mental institution, if the patient goes to his own home, the home of a relative, a boarding home, or to a nursing home not specifically established for psychiatric care.

STATE AGENCY REACTION TO ADMINISTRATIVE CHANGES

State agency administrators meeting in Washington the latter part of January to discuss the implications of the earlier administrative

actions and to plan for their implementation at the State and local level reported "basic agreement between the two levels of government, an eagerness to move forward on a broad front in improving and strengthening public welfare programs, and satisfaction in the far-reaching progressive leadership given by Secretary Ribicoff, Wilbur Cohen, and other members of the Department."

They pointed up areas needing further clarification; asked for help in developing in-service training programs, in preparing plan material, and in case classification; and urged the Department to give strong leadership in helping social work gain increased recognition. They also asked for guide materials in planning for social services on a statewide basis, recognizing the lack of community resources in remote areas and the differences in staff capabilities. They cautioned that a sound service program must be based upon adequate financial assistance and expressed concern that an increased emphasis on services to children not result in diminished services for the aged, blind, and disabled.

While there was unanimous support for the goals and objectives of both the administrative directives and the overall legislative proposals, the State administrators pointed out that "such changes take much time . . . we will of necessity be slow in implementation of many of the facets; we will not promptly reduce the caseloads or costs, and there are many factors which indicate we will always have high, and perhaps higher, caseloads and increased costs. . . ."

Some of the Secretary's directives and many of the recommendations made by the State administrators and other groups, including the White House Conference on Aging, were subsequently reflected in amendments to the Social Security Act passed in 1962.

Public Welfare Amendments of 1962

Public Law 87-543, approved July 25, 1962, provides a legislative base for implementing the Administration's goals to help needy persons attain or retain capability for self-care and self-support, and to maintain and strengthen family life for children.

Through new financial incentives, the States were urged to provide welfare services that are likely to prevent or reduce dependency, and to develop training programs to increase the number and skill of workers providing such services. Increased Federal funds were allocated for the adult assistance programs to enable the States to increase payments to recipients. In aid to families with dependent children (AFDC formerly ADC), Federal financial participation was authorized in expenditures for work performed by adult relatives under community work and training programs that provide opportunities

for conserving and developing work skills. Special protection for the child was provided in the event his parent or other relative does not spend the assistance money for the benefit of the child. Several new provisions also were directed toward more effective administration of the welfare programs.

In approving the Public Welfare Amendments of 1962, President Kennedy said, "the new legislation marks a real turning point in the Nation's effort to cope realistically and helpfully with pressing welfare problems."

The major provisions of the law, directed to certain objectives, are outlined below.

To Promote Self-Reliance

Federal participation in the State's administrative costs of providing prescribed or specified services in all the assistance programs was increased to encourage States to provide social services to alleviate economic or personal dependency or contribute to its prevention. Services to persons formerly but not now receiving assistance, or considered likely to become dependent within a specified time, however, are to be provided only upon request.

In the period September 1, 1962, through June 30, 1963, 75-percent matching is available for certain services designated by the Secretary. Beginning July 1, 1963, the Secretary is authorized to prescribe these minimum services. If the minimum prescribed services are provided, 75-percent matching is available in the costs of such services and also in other specified, but optional, services that may prevent or reduce dependency. If a State does not provide the prescribed minimum services, Federal participation will be 50 percent, as before.

As previously, in all programs, the choice remains with the State agency as to whether services are to be provided, but the State plan must include a description of any services that are made available and steps to assure maximum use of related agencies. Beginning July 1, 1963, in the aid to families with dependent children program (AFDC) the State plan must also provide for the development and application of such welfare and related services as may be necessary because of home conditions and the specific needs of each child, and for the coordination of services provided under the public assistance program with those provided by the State's child welfare program.

Services generally are to be provided by public assistance staff. If the State public assistance agency determines, within the limits prescribed by the Secretary, that it cannot offer welfare and related services economically or efficiently and such services are not reasonably available otherwise to persons in need of them, these services may be purchased, by agreement, from other State agencies. There is further provision concerning vocational rehabilitation services (as defined in the Vocational Rehabilitation Act, e.g., counseling, training, and placement for the physically or mentally handicapped) available through the State vocational rehabilitation agency, or which this agency is willing to provide pursuant to agreement.

To Upgrade Staff Skill in Providing Services

A major objective of the new legislation—to help people move from dependency toward self-reliance—is largely dependent upon personnel capable of providing necessary services. To upgrade staff skill, Federal participation was *increased* from 50 to 75 percent in a State's expenditures for training personnel employed or preparing for employment in public assistance. This applies to the administrative costs of in-service training programs, training grants for prospective employees, and stipends to welfare staff on educational leave, effective September 1, 1962, for States with an approved staff development plan. Beginning July 1, 1963, the 75-percent matching of a State's costs for staff development will be available only to those States which also provide the minimum prescribed services to recipients.

Funds were also authorized for other training to be administered by the Department directly or through grants to or contracts with institutions of higher learning without State financial participation, but no appropriation was made under this authority in 1962.

To Provide Work Incentives and Encourage Efforts To Achieve Self-Support

To encourage States to provide useful work experience and constructive training for adults receiving assistance under aid to families with dependent children, Federal participation was provided in the form of payments for work by those employed on community work and training projects that meet prescribed working conditions and safeguards.

All specified requirements became effective October 1, 1962. However, States were permitted to claim Federal matching for work payments in any period beginning July 1, 1961, through September 30, 1962, if specified conditions, with certain exceptions, were met. This program was authorized for a temporary period, ending June 30, 1967.

Other work incentives were afforded through provisions that (1) require taking into account necessary expenses that can reasonably be attributed to the earning of income in determining need under all the federally aided assistance programs; (2) permit exemption of some earned income in determining need under the old-age assistance program; (3) require disregarding, for not more than 12 months, income and resources in determining need for an aid to the blind recipient who has a plan for achieving self-support in addition to the amount of earned income otherwise exempt; and (4) permit States to set aside earned or other income of an AFDC family for future identifiable needs.

Thus, in determining need and the amount of an old-age assistance payment, States are permitted to disregard the first \$10 of earned income plus one-half the remainder of the first \$50, effective January 1, 1963.

In the aid to the blind program, in addition to the provision of a 1960 amendment, effective July 1, 1962, which requires disregarding the first \$85 per month of earned income plus one-half of earned income in excess of \$85, further provision was made to disregard additional amounts of other income and resources for a period not to exceed 12 months to enable a blind individual to fulfill a State-agency-approved plan for achieving self-support.

To Extend the Adequacy and Scope of Public Assistance

The formula for determining the amount of Federal participation in State public assistance payments to the aged, blind, and disabled was liberalized, effective October 1, 1962. The Federal share of the average monthly assistance payment in old-age assistance, aid to the blind, and aid to the permanently and totally disabled was raised from $\frac{1}{2}$ of the first \$31 to $\frac{29}{35}$ of the first \$35, and the average maximum was increased from \$66 to \$70.

In approving the 1962 amendments, President Kennedy pointed out that, "The reports of both the Ways and Means Committee of the House of Representatives and of the Committee on Finance of the Senate make it clear that the States are expected to pass these additional funds on to the recipients under these programs. It would truly be a miscarriage of justice and a frustration of the legislative intent if these new Federal funds merely replaced existing State funds, and those for whom the increase was intended were denied the full benefit."

Assistance to dependent children of unemployed parents, authorized in 1961 for a 14-month period ending June 30, 1962, was extended for 5 years, to June 30, 1967. Also, the aid to families with dependent children program was broadened to include both parents as eligible recipients when deprivation of parental care or support is due to incapacity or unemployment.

To assure that an assistance payment made on behalf of a child is spent in his best interests, in instances where there is evidence that the money is being used in ways that are detrimental to or threaten the well-being of the child, the State agency may take any of the following actions. It may provide counseling and guidance services to the relative payee on the proper use of such payment; it may advise the relative that continued failure to use the payment for the benefit of the child may result in court appointment of a legal representative or guardian, or in criminal or civil penalties imposed by a court of competent jurisdiction; or under specified conditions, it may make a "protective payment" without loss of Federal funds.

A "protective payment" is a money payment to a substitute payee—a third party, such as a relative, friend, or individual who is a member of a church, community service group, or public or voluntary agency who is interested in the welfare of the family. When such payments are made, safeguards are included to assure that (1) consideration is given in the selection of a substitute payee to qualifications for assuming this responsibility and acceptability of the individual to the family, the needs, and problems in the home and the nature of the difficulties that led to the present need for help in money management; and (2) special efforts or services are directed toward helping the relative payee develop his ability to manage funds, since the purpose of the protective payment is to strengthen the child's own family rather than to provide care for the child in a foster home.

The State may receive full Federal financial participation in protective payments made to a limited number of recipients (not exceeding 5 percent of the number of other AFDC recipients in the State for such month) during the period October 1, 1962, through June 30, 1967.

To increase resources for the care of children removed from the home, the following actions were taken.

(1) The 1961 amendment, which temporarily provided Federal financial participation in State expenditures for a dependent child in a foster family home, was made permanent.

(2) The limitation that responsibility for placement and care be only in the State or local agency administering AFDC was modified until June 30, 1963, to include responsibility for placement and care by other public agencies. However, a current interagency agreement must assure the development of a plan for the children that will accomplish the objectives of the AFDC program. Before March 1963, the Secretary is to report on the effectiveness of this provision and recommend further action.

(3) Federal participation was also temporarily authorized in State AFDC payments in the form of foster care for children who must be removed from their home and placed in a licensed or approved private nonprofit child-care institution (from October 1, 1962, through September 30, 1964). Payments for maintenance, such as board and room, clothing, medical care, and other needs—but not overhead costs of the institution—may be made to the institution.

The program of assistance to Americans repatriated to the United States from abroad was extended from June 30, 1962, through June 30, 1964. This program was authorized by Congress in 1961 because of the need for emergency aid that might result from international crises or severe personal problems which befall the increasing number of Americans living or traveling abroad.

To Assure More Effective Administration

A move toward a noncategorical approach was reflected in title XVI added to the Social Security Act to permit replacing the present separate State plans with a single plan consolidating all adult programs, effective October 1, 1962. (In States which have a separate agency for the blind under title X, that agency may be designated to administer or supervise as a separate plan the portion of the State plan under title XVI which relates to blind individuals.)

The new title does not, in most instances, modify existing provisions in titles I, X, and XIV, but to the extent that eligibility conditions are the same for aged, blind, or disabled persons, the new program under a single State plan permits simplification. The single State plan would have a common standard for determining need and payment, except for the disregard of earned income of those in the aged and blind groups; and assistance payments for the aged, blind, or disabled would be averaged in computing the amount of Federal financial participation under the new program. Also, the separate and additional Federal financial participation for medical care authorized under title I will be available under title XVI for medical care for the blind or disabled, as well as the aged. Medical care for the first 42 days of an aged individual's stay in a general medical institution as a result of a diagnosis of psychosis or tuberculosis is also extended to blind or disabled persons.

To stimulate experimental projects to test new ideas and ways of dealing with public welfare problems, the Secretary is permitted to waive State plan requirements that may interfere with such demonstrations, such as the requirement that a plan must be in effect throughout the State, since such projects usually are not statewide. The law also authorizes use of not more than \$2 million

a year, for 5 years, of funds appropriated for public assistance to assist in paying that portion of the costs of projects not otherwise subject to Federal participation.

A 12-member Advisory Council on Public Welfare is to be appointed in 1964. This group, representing the general public and various interests concerned with public and voluntary welfare programs, is to review and make recommendations on the Federal-State public assistance and child welfare services programs; and to study the relationship between the public assistance and the old-age, survivors, and disability insurance programs. The first Advisory Council is to submit a report to the Secretary by July 1, 1966. Subsequent similar councils are also authorized.

Trends in Caseloads and Expenditures

In June 1962 assistance was available in all 54 jurisdictions of the country (including the District of Columbia, Guam, Puerto Rico, and the Virgin Islands) under federally aided programs of old-age assistance (OAA), aid to the blind (AB), and aid to families with dependent children (AFDC).

Fifteen jurisdictions administering AFDC also made payments to unemployed-parent families, compared with 6 in June 1961, and 13 jurisdictions made payments for the foster-family care of children, compared with 1 in June 1961.

Federally aided programs for the permanently and totally disabled were administered by 50 jurisdictions, and an additional APTD program was started in Arizona on July 1, 1962.

Twenty-seven jurisdictions, compared with 10 in June 1961, had a program of medical assistance for the aged, now in its second year.

General assistance (wholly State and/or locally financed), in some form for some persons, was available in all 54 jurisdictions.

CASELOADS

About 7.3 million persons were receiving aid in June 1962 under the six public assistance programs—old-age assistance, medical assistance for the aged, aid to families with dependent children, aid to the permanently and totally disabled, aid to the blind, and general assistance. With increases in MAA, AFDC, and APTD more than offsetting decreases in OAA, AB, and GA, the net increase in June 1962 over June 1961 was 180,000 recipients (or 2.5 percent)—considerably less than the 432,000 (or 6.3 percent) increase in June 1961 over June 1960.

There were 101,600 recipients of MAA in the 27 States with such programs in June 1962 compared with 46,000 receiving such assistance in June 1961, when only 10 States had such programs. The MAA program was initiated in October 1960 under an amendment passed in September 1960.

In AFDC, the 3,692,600 recipients (including 2,853,400 children in 944,000 families) assisted in June 1962 represents an increase of 310,000 over June 1961. This 9.2-percent increase is attributable in part to the increase of 125,000 recipients in unemployed-parent families, and also reflects the continuing growth in child population.

The 417,000 persons receiving APTD in June 1962 represents an increase of 8.7 percent over the 384,000 aided a year earlier. The increase in 1962, slightly higher than the 5.8-percent increase in June 1961 over June 1960, is a continuation of the gradual but steady increase in the number aided under this program since its initiation in 1950.

The 2.2 million recipients of old-age assistance in June 1962 represents a 59,000 (or 2.6 percent) decrease from June 1961, due largely to liberalizations in eligibility requirements for the old-age, survivors, and disability insurance program (OASDI) and transfers of aged persons in medical institutions and/or nursing homes to newly established programs of MAA. A similar 2.6-percent decline in OAA recipients in June 1961 from June 1960 is part of the slow but steady decline in the number receiving OAA since 1951.

However, the 34 percent of OAA recipients receiving both public assistance and social insurance in June 1962 because their insurance benefits and other resources were insufficient to meet their basic needs, such as medical care, is a continuation of the steady increase in concurrent receipt of assistance and insurance. Since 1950 when OAA and OASDI were concurrently received by less than one-tenth of the total OAA caseload, the number receiving both has steadily grown until they represented slightly more than one-third of all OAA recipients in 1962.

The 100,400 recipients of aid to the blind in June 1962 represents a 4.9-percent decline from the 106,000 aided in June 1961. The June-to-June decline in 1962 is greater than the 2.2-percent decrease for the same period between 1961 and 1960.

The 812,000 persons in 340,000 cases receiving general assistance in June 1962 represents a 16-percent decrease from the 1,040,000 persons in 405,000 cases receiving general assistance a year earlier.

One in 25 persons in the total population was a recipient of public assistance in June 1962. The recipient rate varied widely by program. One out of every 8 aged persons received old-age assistance; only 1 out of every 24 children received AFDC.

The recipient rate also varied by State, due in part to variations in per capita income. States with relatively high per capita income are likely to have a relatively small proportion of their population in need; conversely, States with low per capita income usually have a high incidence of need.

Although a majority of persons applying for assistance do not receive OASDI benefits (e.g., voluntary reports from 29 States indicate that of the cases approved January-June 1961, 97 percent in AFDC, 97 percent in GA, 90 percent in APTD, 86 percent in AB, and 53 percent in OAA were not receiving OASDI benefits), a State's assistance recipient rate is usually inversely related to the proportion of persons in the State who do receive OASDI benefits. In general, in States where more persons receive OASDI benefits, the proportion of the aged receiving OAA is lower than in States with smaller numbers of OASDI beneficiaries.

Voluntary reports from 29 States also indicate that one out of every six applicants for whom old-age assistance was approved during the last 6 months of fiscal 1961 found it necessary to apply for assistance because of increased need for medical care or because of exhaustion or reduction of assets to meet medical care expenses during the 6 months preceding application. For persons who have been receiving OASDI benefits and have found it necessary to ask for old-age assistance, the proportion for whom medical care is the immediate reason was more than twice as high (29.3 percent) as that for persons approved for assistance who are not receiving OASDI benefits (12.2 percent).

EXPENDITURES

Total assistance expenditures, including vendor payments for medical care, for all six programs for the fiscal year 1962 were \$4,269 million—an 8.4-percent increase over expenditures in 1961. Total expenditures in June 1962 compared with a year earlier reflect both *increases* of \$220 million or 19.6 percent in AFDC, \$153 million or 357.2 percent in MAA, and \$33 million or 11.0 percent in APTD; and *decreases* of \$16 million or 0.8 percent in OAA, \$1 million or 1.2 percent in AB, and \$58 million or 12.4 percent in GA programs in 52 States. Assistance payments during 1962 represented about a cent per dollar of total personal income in the Nation during 1961. The cost per person in the United States was \$22.92.

In aid to families with dependent children, the national average monthly payment was \$31.48 per recipient in June 1962, compared with \$30.30 a year earlier. Average payments per recipient ranged from \$9.15 in Mississippi (except for \$3.76 in Puerto Rico) to \$47.52 in New Jersey.

In old-age assistance, the average payment was \$72.55 per recipient in June 1962, compared with \$67.85 in June 1961—an increase of nearly \$5. Average payments ranged from \$36.03 in Mississippi (except for \$9.05 in Puerto Rico and \$33.89 in the Virgin Islands) to \$103.42 in California. For all States, the average medical care vendor

payment per recipient of old-age assistance increased from \$11.12 per recipient in June 1961 to \$14.49 in June 1962.

In medical assistance for the aged, the average vendor payment per recipient, as reported by 26 of the 27 States with programs in June 1962, was \$171.36, compared with \$201.33 per recipient in the 9 States making payments in June 1961. Average MAA payments ranged from \$18.40 in Kentucky (except for \$18.10 in the Virgin Islands¹) to \$394.15 in Louisiana.

In aid to the permanently and totally disabled, the average payment per recipient was \$72 in June 1962, compared with \$68.21 a year earlier. The nearly \$4 increase was centered largely in vendor payments. Average payments ranged from \$34.44 in Mississippi (except for \$8.75 in Puerto Rico, \$24.85 in Guam, and \$34.08 in the Virgin Islands) to \$131.77 in Massachusetts.

In aid to the blind, the average payment per recipient was \$77.47 in June 1962, compared with \$73.36 a year earlier. Average payments ranged from \$38.13 in Mississippi (except for \$8.33 in Puerto Rico²) to \$121.72 in California.

In State and/or locally financed general assistance programs, the average payment per case excluding medical care vendor payments, was \$65.78 in June 1962, compared with \$65.13 in June 1961 for 52 jurisdictions (Idaho and Indiana excluded). Average payments per case ranged from \$12.65 in Alabama (except for \$8.31 in Puerto Rico³) to \$123.94 in New Jersey. Thirty-seven percent of all cases were family cases, including an average of 4.4 persons per family.

The wide variation in average monthly payments between States is closely related to per capita income and willingness to support public assistance programs.

States with relatively high per capita income usually have a relatively small proportion of their population in need, but a relatively greater fiscal capacity to meet needs that occur. States with relatively high per capita income, thus, usually make relatively higher payments than States with low per capita income in which there is both a high incidence of need and low fiscal capacity.

Some States with low per capita income make a strong effort to finance public assistance, and as a result, their expenditures per inhabitant are larger than other States with similar per capita income. In general, however, States with low per capita income provide smaller average amounts of assistance. Therefore, matching formulas for Federal participation in State expenditures for public assistance

¹ Too few recipients in Guam and New Hampshire to compute a reliable average payment.

² Too few recipients in Guam and the Virgin Islands to compute a reliable average payment.

³ Too few recipients in Guam to compute a reliable average payment.

have been designed to be of relatively greatest help financially to low-income States.

Factors contributing to increased expenditures in 1962 include: the increase of 125,000 persons in the unemployed segment of the AFDC program, growth in existing MAA programs and initiation of new programs in 17 States, initiation of vendor payments in OAA for certain types of medical care in 6 States, an increase in rates for vendor medical services in several States due to the rising cost of medical care, and an increase in the level of money payments to meet the rising cost of living.

Higher level of payments in several States resulted from actions taken to utilize additional Federal funds made available for OAA, AB, and APTD under the 1961 amendments to the Social Security Act. Cost standards used in determining eligibility for and the amount of assistance payments, for example, were also increased in one or more programs in about a fourth of the States, a few States raised their maximums on individual monthly payments, and some States removed or lessened percentage reductions in need met.

SOURCE OF FUNDS FOR PUBLIC ASSISTANCE PAYMENTS

Of \$4,269 million expended for the six public assistance programs in fiscal 1962, about 54.0 percent, or \$2,304 million, came from Federal funds; 34.7 percent, or \$1,482 million, from the States; and 11.3 percent, or \$483 million, from the localities.

For the five special types of public assistance, the Federal share of total costs was 59.7 percent; the State share, 32.7 percent; and the local share, 7.7 percent.

Program Developments

In addition to the new program provisions provided through administrative action or legislative change during the year, significant developments have occurred in several program areas.

DEVELOPMENTS IN MEDICAL CARE

By 1960, more than four-fifths of the Nation's jurisdictions had some provision in their public assistance programs to pay for medical care directly to the suppliers of such services, commonly known as the vendor payment, and many of the jurisdictions provided for some items of medical care in the money payment to recipients. However, the majority of the States are not yet providing the broad scope of services needed by most sick people.

In September 1960, two additional medical care provisions for the aged were authorized by Congress under Public Law 86-778, popularly known as the Kerr-Mills legislation. These included: (1) a new

Federal-State program of medical assistance for the aged with Federal funds to help the States pay for medical care for older persons whose income and other resources are above the financial level of eligibility for old-age assistance, but not sufficient to meet the costs of their medical care needs; and (2) increased Federal funds to enable the States to improve medical care services in their existing old-age assistance programs, or to develop such medical care services.

The 1960 provisions augmented the amount of medical care that could be made available previously under federally aided public assistance programs. As a result, payments by States to suppliers of medical care under the federally aided public assistance programs, including medical assistance for the aged, have increased from less than \$400 million in fiscal 1960 to about \$712 million in fiscal 1962. About \$195 million of the 1962 expenditures are attributable to the new medical assistance program for the aged program.

Medical Assistance for the Aged (MAA)

The Federal provisions of the MAA program are liberal and flexible. The Federal Government shares with the States in the total cost of the program without any limitation on the individual payment or on total State expenditures. The amount of Federal participation ranges from 50 to 80 percent of medical care expenditures paid to suppliers of medical care in behalf of eligible recipients, the higher percentages going to the States with lowest per capita income.

Under this new program States may make available a broad scope of medical services: inpatient hospital services; skilled nursing-home services; physicians' services; outpatient hospital or clinic services; home health care services; private-duty nursing services; physical therapy and related services; dental services; laboratory and X-ray services; prescribed drugs; eyeglasses, dentures, and prosthetic devices; diagnostic, screening, and preventive services; and any other medical or remedial care recognized under State law.

Although the law specifies a broad scope of care and services that may be provided as medical assistance for the aged, the States determine the kinds and extent of services for which costs will be assumed and the conditions of eligibility for such services. Relatively few conditions are imposed by the Federal act: the State must include both institutional and noninstitutional care; a durational residence requirement is not permitted; a lien may not be placed against the property of any individual prior to his death on account of medical assistance properly paid in his behalf, and recovery of such assistance cannot be made except from his estate after the death of the surviving spouse, if any; no charge, such as an enrollment fee or premium, is permitted as a condition of eligibility; and disclosure of information

concerning applicants and recipients is restricted to purposes directly connected with the administration of the program.

State implementation of the MAA program.—By August 31, 1962, half the States and 3 other jurisdictions had MAA programs in operation; the number had doubled from 14 States in August 1961 to 28 States⁴ in August 1962. The number of recipients under this program nearly doubled during the year, from 59,100 in August 1961 to 108,900 in August 1962. About a third of the recipients for whom MAA was authorized since it began came from other assistance programs primarily in States that paid for nursing-home care, and whose average payments under OAA exceeded the maximum amounts in which Federal financial participation is available.

There is considerable range among the participating States both in the number and proportion of persons receiving medical care under MAA and in the average payment per recipient. For example, in August 1962, the number aided ranged from 20 in New Hampshire to 30,503 in New York, and 2 States made no payments during the month. Nearly two-thirds of the recipients were in three States. Average MAA payments ranged from \$20.86 in Kentucky to \$418.47 in Illinois. The average payment for all States was \$215.61.

The States, in most instances, began on a conservative basis. Of the 28 States (25 States and 3 other jurisdictions) operating medical assistance for the aged programs in August 1962, 3 provided for comprehensive care in each of the 5 major areas of medical services (hospitalization, nursing-home care, physicians' services, prescribed drugs, and dental care). Four additional States gave some care in each of the major areas but with significant limitations on the condition for which care would be provided or the extent of such care. Six States provided only two services, one institutional and one non-institutional, the minimum required by law.

All 28 jurisdictions provided for hospitalization on some basis, but with varying limitations as to the number of days of hospital care and the nature of the medical need, e.g., emergency or life-endangering conditions.

Nursing-home care was included in 18 of the State programs. In four of these States, care was restricted to post-hospital care. In the other 14 States, restrictions related largely to rates of payment.

Twenty-six States provided physicians' services but in two of these States, such services were available only as outpatient clinic services. In 17 programs,

⁴ Alabama, Arkansas, California, Connecticut, Guam, Hawaii, Idaho, Illinois, Kentucky, Louisiana, Maine, Maryland, Massachusetts, Michigan, New Hampshire, New York, North Dakota, Oklahoma, Oregon, Pennsylvania, Puerto Rico, South Carolina, Tennessee, Utah, Vermont, Virgin Islands, Washington, and West Virginia.

physicians' services were limited as to the number of visits during a given period or the nature of the illness or condition covered.

Prescribed drugs were included in 16 States, and were available without narrow limitations in 8 of these States. Dental care was covered in 11 States but with restrictions; most of the States did not provide for dentures.

Five of the 28 States provided for more medical services in MAA than in OAA; 13 provided substantially the same breadth of service as was available in old-age assistance through vendor-payment provisions; 8 provided for less service than for OAA recipients, usually omitting dental care, prescribed drugs, or nursing-home care; and in 2, the variations prevented classifications under any of the above headings.

The extent to which States are reaching into the group of medically indigent through this program is limited. The basis on which eligibility for MAA is determined by the different States is only slightly higher than that used for old-age assistance, as evidenced by the consideration given by the States to income and other resources, such as personal property, life insurance, and real property in determining eligibility. In addition, in more than half the 28 States, persons otherwise eligible can receive help under MAA only after health insurance or such other potential resource has been utilized. Eight States also include a deductible feature—an amount, such as \$50 or \$100, which must have been obligated by an individual in a year for medical care before he can be eligible for participation in the program.

Consideration of income.—Generally, the States with MAA programs use a specified level of income in determining financial eligibility. In most States, a person with income in excess of a specified amount is ineligible. In six States, the income figure represents the amount considered as needed for living expenses, and income or available assets beyond that amount are evaluated against the probable cost of medical care needed by the individual. The most liberal annual income figure used by a State is \$2,000 for a single person. The most common amount is \$1,500, and the next most common amount is \$1,200, with two States below this figure. The most common figure of \$1,500 approximates the highest figure—\$1,587—in a State OAA program (excluding Alaska) for a single person living alone for essential maintenance costs, in January 1961.

Consideration of life insurance.—Twenty-six of the 28 States exempt life insurance under specified conditions, such as: 1 State, a reasonable cash surrender value; 15 States, within a dollar maximum ranging from \$500 to \$2,000, with \$1,000 the most usual limit; and 10 States, within the dollar maximum for all personal property. The other two

States provide for full utilization of any cash resource available from the insurance.

Consideration of other personal property.—All 28 States take into account the availability of other personal property to meet medical care costs. In 26 States, there are dollar limits on the amount that may be held without affecting eligibility. These range from \$50 to \$2,800, with most between \$1,000 and \$2,500. Nine include both real and personal property within the stated limit.

Consideration of real property.—All States exempt the property used as a home but six States require that equity in the home not exceed a stated amount. With respect to real property other than that used as a home, five States do not allow holding such property, and four States set limits on the value of such property that can be held but require it to be income-producing. Of the other States, some require the value of such property in excess of certain limits to be applied to medical costs, and others specify limits on the value of such property which may be held.

In general, States have been more liberal in the limits set for real and personal property which an individual may retain and remain eligible for medical assistance for the aged than is true for old-age assistance. However, with but 28 of the 54 jurisdictions utilizing Federal aid available for MAA, the limited scope of medical services being provided, and limitations imposed on income and resources, the benefits of the MAA program are reaching a relatively small segment of the elderly of the Nation, and the potential of the Federal legislation is not yet being realized. With more experience in this area, some States will probably expand their MAA programs, and others will establish programs, but the cost factor could continue to be a deterrent to expansion.

The Secretary of Health, Education, and Welfare, in transmitting to the House Ways and Means Committee the "Report on Medical Care Under Public Assistance" covering the first year's experience under the Kerr-Mills legislation (October 1960–October 1961), concluded that "to rely on existing public assistance legislation alone as a means of meeting the medical-care needs of aged persons would not only fail to cover many aged people in need, but would also be very costly in general revenues. The legislation could, and in my judgment should, be a supplement to the type of protection which would be afforded under the administration's proposals for health insurance for the aged through social security."

Increased Medical Care Provisions Under Old-Age Assistance (OAA)

The 1960 legislation provided for a substantial expansion in Federal participation in payments to suppliers of medical care for old-age

assistance recipients. In addition to the usual share in assistance payments, the Federal Government provided an additional amount based on expenditures for payments to suppliers of medical care up to a monthly maximum of \$12 per recipient (raised to \$15 in 1961). The additional funds were intended to enable States to improve or to initiate medical care services in old-age assistance programs.

Between October 1, 1960, (the effective date of the new legislation) and August 31, 1962, of the 43 States which were already making some vendor payments for medical care costs of old-age assistance recipients, 25 expanded or improved the coverage or content of medical care services, 4 broadened the scope by including persons only in need of medical care, and 14 continued the level of services previously offered. Ten of the other 11 jurisdictions provided medical care services for the first time through vendor payments, and 1 secured legislative authority for vendor payments for old-age assistance recipients.

Scope of medical care provided.—Of the 53 jurisdictions making vendor payments for medical care services for OAA recipients in August 1962, 22 were providing a relatively comprehensive scope of services—15 made vendor payments in each of the five major kinds of medical care (hospital care, nursing-home care, physicians' services, dental care, and prescribed drugs); and 7 used the vendor-payment method for all of these services except nursing-home care (for which payment was made through the money payment to the recipient).

Of the other 31 States providing vendor-medical care payments, 11 provided 4 of the major services (2 of them used the money payment for nursing-home care); 5 provided hospital and nursing-home care plus other physicians' services or prescribed drugs; and 15 provided 1 or 2 of the major services, usually hospitalization.

Content of medical care provided.—*Hospitalization*, the kind of care most frequently provided through the vendor payment, was available in 47 States, although usually limited as to the nature of illness or duration of care needed. (One State used the money payment for hospital care.)

Nursing-home care was provided through the vendor payment by 36 States (14 used the money payment for this—in 4 of these States, the maximum on the individual money payment was \$100 or less per month, and in the others, the limitations were related to rates for specified kinds of care).

Payments to physicians, the service next most frequently provided through the vendor payment, was available in 38 States (6 used the money payment for physicians' services), although usually restricted the number of physicians' visits.

Dental services were provided by 30 States through the vendor payment (9 used the money payment), but frequently were limited to relief of pain or necessary extractions; some States which include dentures limited the circumstances under which such services may be authorized.

Prescribed drugs were provided by 31 States primarily through the vendor payment (9 used the money payment).

Many States also provided for other medical services through the vendor payment, such as special nursing care in the patient's own home, transportation to receive medical care, or rehabilitative services (physical or speech therapy, outpatient laboratory and diagnostic services, and prosthetic appliances or special equipment).

States with high average vendor payments presumably provide a more adequate level of medical care to aged recipients. Chart 13 shows that in June 1962 States having high average vendor payments per recipient under the MAA program were widely scattered throughout the country. For OAA, States with relatively high average vendor payments for medical care were largely concentrated in the Northeast, the North-central, and the Pacific Northwest areas. Averages were generally low in the South.

As indicated in chart 14 the amount of expenditures for medical services provided to recipients of the different federally aided assistance programs varies greatly. This is clearly evident in the wide

CHART 13.—MEDICAL ASSISTANCE FOR THE AGED: AVERAGE PAYMENT PER RECIPIENT FOR VENDOR PAYMENTS FOR MEDICAL CARE, JUNE 1962

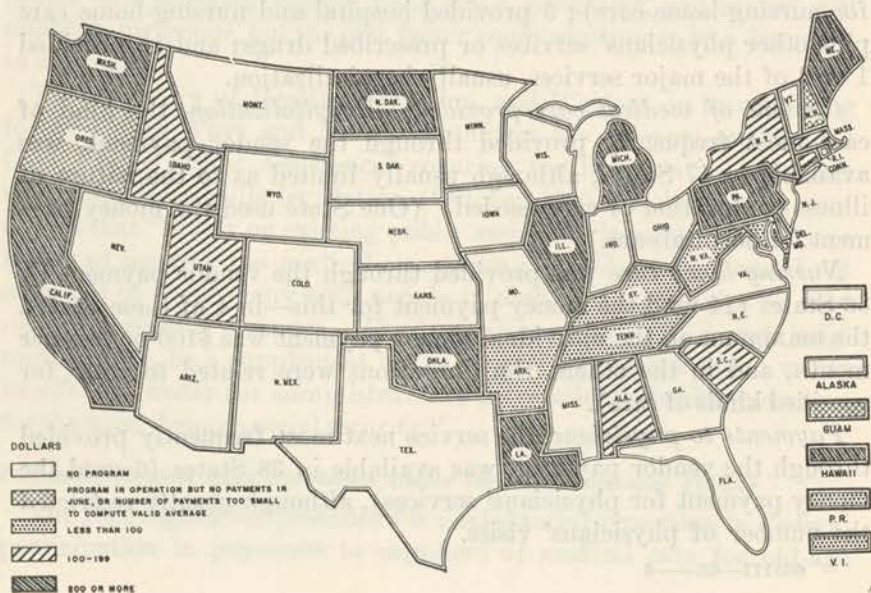
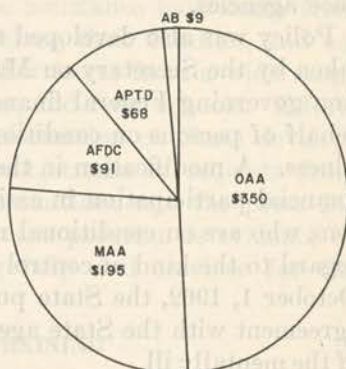


CHART 14.—VENDOR PAYMENTS FOR MEDICAL CARE

AVERAGE PAYMENT PER RECIPIENT
JUNE 1962 $\downarrow$ PAYMENTS, FISCAL YEAR 1962
IN MILLIONS—TOTAL \$712

PROGRAM	AMOUNT
MAA	\$171.65
APTD	15.58
OAA	14.49
AB	8.08
AFDC	2.29



¹ Except for MAA, averages based on cases receiving money payments, vendor payments for medical care, or both.

range in the average monthly medical vendor payment per recipient in June 1962—from \$2.29 in aid to families with dependent children to \$171.36 in medical assistance for the aged. These averages, however, not only reflect differences in medical care available under the programs, but also differences in utilization of services, availability of treatment through other sources, and relative costs of similar care for different types of cases.

Efforts To Improve Medical Care Programs

High priority was given to consideration of major policy issues under the 1960 medical care provisions, development of instructional material for State use in improving the scope and quality of their medical services, and issuance of interpretative materials. Consultation was provided to State agencies on the development of necessary State legislation and plans to put the new medical care provisions into effect. State officials also met with Bureau staff in Washington to consider specific State situations.

The Bureau released to the States a statement entitled "Financial Eligibility: Medical Assistance for the Aged," summarizing the criteria and methods governing financial eligibility requirements developed by the first 10 States to begin MAA programs. "Casework Services in Public Assistance Medical Care," issued by the Bureau in May 1962 as a guide for the use of State agencies, discusses the skills and services frequently necessary to enable those requiring medical attention to obtain early treatment, to use the opportunity fully, and to maintain the benefits of such care. This publication, available from the U.S. Government Printing Office, is now in its second printing.

Work continued, with the help of the medical advisory group appointed in 1961, on developing the content for guides and recommended standards in the provision of medical care by public assistance agencies.

Policy was also developed to implement the administrative actions taken by the Secretary on March 5, 1962, liberalizing the interpretation governing Federal financial participation in assistance to or on behalf of persons on conditional release from institutions for mental illness. A modification in the definition of "inmate" permits Federal financial participation in assistance payments to or on behalf of persons who are on conditional release from mental institutions without regard to the kind of control still exercised by the institution. After October 1, 1962, the State public assistance agency must develop an agreement with the State agency or agencies responsible for the care of the mentally ill.

A report of a study of selected content of State provisions for the blind in four States was prepared as a basis for strengthening services for this group of recipients. Work materials were also developed for a review of State practice in the administration of medical care provisions on a comparable base throughout the Nation.

Discussions of mutual benefit were undertaken with State supervising ophthalmologists associated with aid to the blind programs to exchange ideas about their role in this category of public assistance; and with an ad hoc committee of the American Hospital Association to discuss plans for a study of hospital utilization by aged assistance recipients. Joint field visits were made with the Community Health Services Division of the Public Health Service to four States and two other jurisdictions to study relationships between State health and welfare departments that have contracts or agreements for the provision or purchase of medical care for public assistance recipients.

Information was supplied in 1961 for the report, "Medical Resources Available to Meet the Needs of Public Assistance Recipients." A subsequent report, "Medical Care Under Public Assistance," covering the first year of operation under the 1960 amendments (October 1960–October 1961) was prepared and submitted to Congress in March 1962. Both reports were published by the House Ways and Means Committee. "Characteristics of State Public Assistance Plans Under the Social Security Act: Provisions for Medical and Remedial Care," Public Assistance Report No. 49, was issued in March 1962.

To promote better public understanding, a pamphlet on "Medical Aid for Older Persons Through Public Assistance," was prepared; and medical care in public assistance, as provided by the two Federal-State assistance programs for the aged, was the theme of an exhibit, "Public Assistance Helps the Elderly To Meet Their Needs," first

shown at the White House Conference on Aging in January 1961, and subsequently requested for use in various parts of the country.

Since enactment of the Kerr-Mills legislation, requests for information about medical care under public assistance have come from individuals seeking guidance for themselves, their families, and acquaintances; from editors, reporters, and writers; from a wide range of government and private organizations; and from schools. Efforts have been made to obtain up-to-date information on State developments as changes occurred. The constant stream of requests from national organizations, congressional committees, and the press for reports on the progress of the medical care program is evidence of the great public interest in providing help and services for the medically needy.

FROM WORK RELIEF TO WORK AND TRAINING

Work relief—a form of governmental assistance in which needy unemployed persons earn all or part of the assistance payment through employment—was widely used during the thirties to maintain work habits and morale. In the sixties, its objective shifted to rehabilitation through work, education, and training.

When Federal funds became available in May 1961 for assistance to children in families with unemployed parents, States transferred some needy families from their general assistance programs to the amended ADC program. Of the 13 States that provided aid to families with unemployed parents during September 1961, 12 included work relief projects in their general assistance program. In 7 of these 12 States, employable ADC fathers were assigned to work relief projects to earn the State and/or locally financed portion of their assistance payment which was above the maximum amount for which Federal financial participation was available.

A nationwide inquiry into the nature and extent of work relief was made by the Bureau in September 1961. According to the published report of this study, "Work Relief—A Current Look," work relief projects in 438 local jurisdictions in 27 States employed some 30,400 persons. Of those assigned to work relief projects, 86 percent were concentrated in seven States—California, Illinois, Michigan, Ohio, Pennsylvania, West Virginia, and Wisconsin. Work relief recipients represented only a small proportion of the general assistance caseload in these States.

Projects ranged from brush-cutting along remote country roads to training-oriented projects in big-city hospitals. The most prevalent projects, in the order named, were maintenance of streets and roads, custodial work in public buildings, care of park and recreation facili-

ties, and distribution of surplus food commodities. Urban areas offered a greater variety of work than rural areas.

The average monthly amount credited toward the assistance payment of those on work relief was about \$92, and most recipients—92 percent—received their remuneration in the form of an assistance payment; the remaining 8 percent received wages, usually limited by the family's needs as budgeted by the welfare agency. The value of the assistance worked for and wages paid on all work relief projects was about 12 percent of the total spent for general assistance and comparable programs in the 27 States with work relief programs.

The cost of providing work relief beyond assistance was estimated by the Bureau, in the absence of other available data, at \$15 a month per employed recipient to cover expense of transportation, extra food, and clothing; and about \$4 a month per recipient for coordinating the program and assigning recipients to projects. Other costs—materials, tools, and supervision—were usually borne by project sponsors.

Even though relatively few ADC parents were assigned to work relief projects, several States asked that Federal participation be extended to assistance in the form of wages earned under work relief by unemployed parents with dependent children.

A subsequent provision was, therefore, made in the Public Welfare Amendments of 1962 for community work and training programs, for a temporary period ending June 30, 1967, to encourage the education, employment, reemployment, retraining, conservation of work skills, and the development of new skills for potentially employable recipients of the federally aided program of aid to families with dependent children.

The new legislation also provides safeguards, many of which were suggested from earlier experience with work relief. Provision must be made for adequate protection of the health and safety of workers, and appropriate arrangements must be made for the care and protection of children during the absence of parents doing such work. Payment for work done must be at rates not less than those for similar work in the community, and in determining need, consideration must be given to reasonable expenses attributed to such work. Work performed must serve a useful purpose and not interfere with or displace regular employees. Opportunity must be given the worker to seek regular employment and to secure available training. Cooperative arrangements must also be established and maintained with State employment and vocational and adult education agencies for maximum utilization of their resources to improve opportunities of such recipients for regular employment.

EFFECT OF FEDERAL AID TO THE UNEMPLOYED

A temporary measure effective May 1961, for a 14-month period, extended the aid to dependent children program to include families of needy unemployed persons. To determine the extent to which this provision was meeting needs and helping the unemployed parent use community resources to regain employment, a study of its first 7 months' operation was also undertaken by the Bureau. In addition to reviewing State plan provisions and statistical information reported by the States, a review and evaluation of practice was made in 45 localities in the 13 States⁵ making payments under this provision from May through November 1961.

During this period assistance had been granted to 66,100 of the 86,300 unemployed parents who applied in 12 of the 13 States making such payments; nearly half (46 percent) had been transferred from State or local general assistance programs operative in 12 of the States. Unemployment insurance benefits were much less frequently a resource for this group of recipients. Only 12 percent of the families were receiving unemployment compensation at the time of approval of their application for assistance. An additional 19 percent had received such benefits during the 6 months prior to the approval of their application, and 20 percent of the applicants had filed a claim which was pending at the time of approval of the application.

In November 1961, under this new provision, \$6.7 million reached 43,200 unemployed-parent families with 157,000 children; 95 percent of these families lived in 6 States (Connecticut, Illinois, New York, Pennsylvania, Washington, and West Virginia). The average payment per family was \$155, the average payment per recipient, \$34. The average payment per recipient ranged from \$18 in Delaware to \$48 in Illinois. Most of the States aiding unemployed-parent families made higher payments per recipient to families receiving assistance for reasons other than unemployment than because of the unemployment of a parent.

Nearly 40 percent of the cases approved for assistance during the period of the study were closed by the end of the seventh month of operation of the program usually because of employment. About a third of these parents returned to a former job and about two-thirds found work on their own initiative or with the help of friends or relatives; only 3 percent obtained employment through a public employment service referral. The small number who obtained work through such referral highlights the difficulties unemployed persons

⁵ Connecticut, Delaware, Hawaii, Illinois, Maryland, Massachusetts, New York, Oklahoma, Pennsylvania, Rhode Island, Utah, Washington, and West Virginia. (Subsequently, North Carolina and Oregon initiated such payments. On June 30, 1962, Delaware and Washington discontinued them.)

with low education and limited or no skill undoubtedly have in competing with other job applicants. A few welfare agencies in the communities studied established their own employment divisions. Nearly all the 13 States also gave training courses for practical nursing, supervision of food preparation and handling, machine operation, sewing, and typing.

From a review of 1,800 case records of unemployed-parent families in the communities included in the study, it appeared that at the end of September 1961, the unemployed parents aided could be broadly classified into three major groups: (1) unskilled laborers with physical, mental, or emotional handicaps in addition to little education and poor work experience, whose reemployment opportunities seem limited; (2) fathers unemployed less than 3 months, mainly under 45 years of age, with stable work records (many were steel, construction, or seasonal workers) who were already moving toward reemployment on their own initiative; and (3) a larger number of unemployed fathers whose chances of returning to work could probably be improved with training, retraining, or other special services—this group included school “drop outs” and young persons recently discharged from military service with no previous work experience or skills; young workers with several children, limited education, and no skills who had moved from one short-term job to another, with no vocational goal; and older men, generally with large families, education below the eighth-grade level, and, with little, if any, skill transferable to other jobs.

The provision of financial aid under this program undoubtedly prevented family breakup and sharpened public awareness of the needs of families affected by unemployment. But it also made clearly evident the urgent need for more effective mobilization or development of training and other community resources, if significant inroads are to be made on the basic and underlying difficulties facing this segment of the unemployed today.

ASSISTANCE TO U.S. CITIZENS RETURNED FROM FOREIGN COUNTRIES

Americans who become stranded, ill, or destitute in foreign countries are helped to re-establish themselves in the United States through a year-old Federal program. Under this program, assistance and other services are provided for Americans and their dependents identified by the Department of State as having been returned to the United States because of destitution, illness, or international crisis. In cooperation with State and local welfare departments and voluntary welfare agencies, arrangements are made for reception and transportation, temporary financial aid, and necessary social services or medical care.

The first year's operation provided assistance and services to 505 cases of U.S. citizens returned from foreign countries: 153 cases (236 people), including 55 mentally ill persons, referred by the Department of State; 291 cases of U.S. citizens repatriated from Cuba; and 61 mentally ill persons receiving care at St. Elizabeths Hospital. Information or service was provided to 11 additional cases. A total of \$501,000 was expended; \$195,301 for mentally ill persons, and most of the rest for citizens returned from Cuba. (See pp. 19-23 for information on assistance provided to Cuban refugees.)

Policies and procedures for administering this program were developed, and an informational leaflet prepared describing services available to destitute or ill repatriates, and their responsibilities, including repayment for assistance provided, when warranted. Agreement forms were devised for use with cooperating State agencies. Agreements were also made with the Medical Division of the Department of State to facilitate necessary care and treatment of their employees who become mentally ill in foreign countries and are returned to the United States.

The earlier ad hoc Committee on Reception and Processing of U.S. Citizens Returned from Foreign Countries in a National Emergency was reconstituted as the Interdepartmental Committee on Services to U.S. Citizens Returned from Foreign Countries in Emergencies. This committee included, for the first time, representatives from the Office of the Assistant Secretary of Defense (Manpower), the Office of the Assistant Secretary of Defense (Civil Defense), and the Office of Emergency Planning.

The New York regional office continued to carry the major portion of cases referred by the Department of State, since New York is the port of entry of the majority of such repatriated persons. The Atlanta regional office carried primary responsibility for U.S. citizens returned from Cuba. The Atlanta, Chicago, and San Francisco regional offices provided continuing assistance and services to an increasing number of these cases. A number of referrals were also initiated by regional offices and State or local agencies following a returnee's arrival, or at the request of a relative or friend regarding the circumstances of a potential returnee who may not have contacted the Department of State. These situations were brought to the attention of the Department of State.

The Bureau, which receives all referrals initially, continued to arrange for services as needed in individual cases through the regional offices acting under the general coordination and direction of the central office. Services were provided by both public and voluntary agencies. The Division of Hospitals of the U.S. Public Health Serv-

ice continued to provide medical care and services at the ports of entry, and the Division of Foreign Quarantine of the U.S. Public Health Service was involved in providing medical services under P.L. 86-571 at United States Consulates overseas and at ports of entry in the United States. The Bureau's relationships with the Office of Special Consular Services, Department of State, and the Children's Bureau in providing services under these programs were continued and expanded.

CIVIL DEFENSE EMERGENCY WELFARE SERVICES

Emergency preparedness functions were assigned to the Department under Executive Order 11001 on February 16, 1962, with additional responsibilities added for "refuge in shelters." Such functions relating to the welfare field were delegated by the Secretary to the Commissioner of Social Security for administration by the Bureau of Family Services working with the Children's Bureau. This followed the conversion of the Office of Civil and Defense Mobilization to the Office of Emergency Planning, and the assignment of certain civil defense activities to the Office of Civil Defense in the Department of Defense (OCD-DoD).

During the fiscal year, 38 States entered into agreements with the Bureau of Family Services to provide a full range of welfare services in a war-caused emergency. Additional Memoranda of Understanding completed with national voluntary welfare organizations and related national professional and business organizations brought the total to 16.

Under an agreement with OCD-DoD, plans were initiated and questionnaires prepared for a preliminary field review which was conducted in eight cities to determine community readiness to provide emergency welfare services, especially in connection with community fallout shelters.

Information was provided OCD-DoD on welfare resources throughout the country, and data on resources and requirements were provided to the Office of Emergency Planning. Other resources evaluation and damage assessment activities were conducted.

Administrative Developments

Bureau activity during the year was concentrated on developing policy, procedure, and informational materials to implement the Secretary's administrative directives and on planning for proposed legislative changes. Work also continued in implementing measures passed in 1961, and in carrying responsibility for the ongoing public assistance programs.

WELFARE SERVICES

The change in name from the Bureau of Public Assistance to the Bureau of Family Services and the establishment of a Division of Welfare Services reflects the nature of much of the work undertaken during the year in implementing the welfare services emphasis.

Policy framework and interpretative materials were initiated or developed to help States implement measures directed toward providing services to unmarried parents, dealing with family disruption because of desertion, locating absent parents, assuring protection of needy children, assisting families with special problems arising from financial mismanagement or mental or physical inadequacy, initiating work and training programs, and assuming other community planning responsibilities. Work also was undertaken in developing policies and guide materials in problem areas such as residence, earned income in aid to the blind, parental neglect, and institutional care needs of the aged and disabled.

Advisory groups of State representatives helped in the development of policy on foster care and social services, including the identification of services for which increased Federal matching funds would be available and methods of determining the cost of such services. Draft policy materials were prepared and discussed with an ad hoc advisory committee and with State administrators. Methods for a review of State practice in providing services were substantially completed, and planning initiated for State reporting on the services provided. A compilation was also made of State projects on services.

A publication, "Improving Home and Family Living Among Low-Income Families," developed jointly with the Office of Education as a guide for State use in developing projects to increase the house-keeping skills of mothers dependent on public assistance, was sent to State departments of education and State welfare departments. Another publication, "Unmarried Parents—A Guide for the Development of Services in Public Welfare," distributed to State public assistance and child welfare agencies in October 1961 and put on sale by the U.S. Government Printing Office, is now in its second printing. This pamphlet was used as the basis for a joint public assistance and child welfare regional meeting. "Homemaker Service in Public Welfare, the North Carolina Experience," another report in the "How They Do It" series, was issued in December.

Cooperative work also continued with other public and voluntary agencies. Bureau staff participated with the American Public Welfare Association's Project on Aging in their institute on "Planning Improved Services for the Aging Through Public Welfare;" and, in cooperation with other national agencies, in planning and imple-

menting two seminars on community planning on behalf of older persons. One of the seminars was held at Brandeis University in August 1961, and dealt with local community planning; and the other at Arden House, Harriman, New York, in March 1962, was on community planning at the State level. Joint consideration was given also by the Office of Vocational Rehabilitation and the Bureau to ways the vocational rehabilitation and public assistance programs can be more effectively utilized in combating dependency of handicapped persons.

ADMINISTRATIVE AND FISCAL STANDARDS

Policy and guide materials were developed for State use in prevention and control of fraud, including procedures and methods of investigation consistent with the legal rights of individuals. To implement the objective of reducing the number of forms in use and eliminating unnecessary paperwork, a group of State and local staff assisted in considering areas in which simplification of forms and paperwork might be possible, and proposed methods for doing this.

Developmental work also continued on workload standards, case recording, auxiliary staff to the caseworker, single State agency, State field services, caseload classification, and the best use of the caseworker's time. A digest of the Bureau's resource material on the organizational, management, and administrative aspects of the public assistance programs was issued under the title, "Selected References for Public Assistance Administration."

A survey made in Milwaukee focused on finding ways to eliminate nonprofessional functions performed by caseworkers, and to make maximum effective use of professional staff time. A survey of three jurisdictions in Maryland evaluated utilization of professional and clerical staff, as well as the effect of State agency requirements on local agencies. Institutes for county superintendents were held in three States around principles of administration, and the responsibility and practical management of the administrator's job. A statement for the use of county board members was prepared as a result of one of these sessions. Another in the series of conferences of large urban agencies was held in San Francisco in May 1962 to consider various aspects of administration in large cities, including organization, workload standards, caseload management, and procedures by which policy is put into effect. Consultation was also provided on request to several States on machine operations and/or electronic data processing as effective timesaving devices.

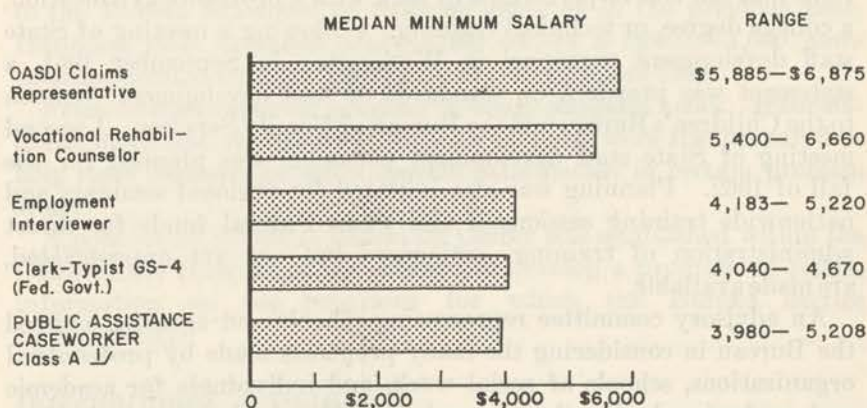
STAFF DEVELOPMENT

With expansion in the scope of public assistance programs and the accent on preventive and rehabilitative services, the complex demands of the public welfare job continue to outstrip efforts to prepare staff to carry that job most effectively. According to the 1960 manpower study, only about 1 percent of the casework group and 13 percent of the supervisory group had a graduate social work degree, 89 percent of the caseworkers had no study in any graduate school of social work, and about a third of those in social work positions did not complete college. Although each caseworker authorizes an average expenditure of \$150,000 a year in assistance payments and the welfare of hundreds of dependent persons is affected by her skill and experience, there was only one caseworker with a graduate social work degree for every 23,000 assistance recipients.

Equally serious is the relatively low salary of those working in public assistance. In 1960, the median salary for caseworkers was \$4,338, and for supervisors, \$5,798. Comparison with other jobs with relative responsibilities, as indicated in chart 15, vividly points up the need for raising salary levels if qualified staff are to accept and remain in public assistance jobs.

Realistically facing the dearth of social work personnel throughout the country, the Bureau's present goal is a third of staff with professional education for leadership positions and casework services to families with serious social problems, and two-thirds of staff with an undergraduate college degree plus agency in-service training to pro-

CHART 15.—SALARY, PUBLIC ASSISTANCE CASEWORKER AND OTHER SELECTED POSITIONS, JULY 1962



¹ Function: Establish eligibility and extent of need and explain laws, regulations and eligibility requirements. (Class B—range \$4,680 to \$6,000—also includes providing social services to clients; usually requires graduate training in social work, but in some States experience may be substituted. However, according to the 1960 Manpower Study, there is only 1 public assistance caseworker with full graduate social work training for every 23,000 assistance recipients.)

Source: Department of Health, Education, and Welfare, Office of Field Administration, Division of State Merit Systems; and U.S. Civil Service Commission.

vide services relating to less serious social problems. Provisions in the Secretary's administrative actions and in the Public Welfare Amendments of 1962 were directed toward making this goal more feasible.

The Secretary's directive in December 1961 required States to have a continuous statewide staff development program fully developed by July 1, 1967. Starting with minimum requirements effective July 1, 1962, flexibility was provided in effecting on a progressive basis an organized staff development program appropriate to the circumstances in individual States. Effective October 1962, States were required to establish a unit responsible for a statewide staff development program headed by a qualified full-time director of staff development, and to have training personnel carry major teaching responsibility to supplement line supervision in order to deepen and broaden knowledge and skill of staff at every level. The 1962 amendments authorized use of Federal funds for the training and professional education of persons employed or preparing for employment in public assistance programs, and provided for increased Federal financial participation in expenditures for training by States providing minimum prescribed services.

During the year, Bureau staff assisted States in the development and implementation of their staff development programs. Guide materials were developed and work initiated in preparing teaching materials directed toward the needs of the new worker and the county director; in identifying and adapting casework concepts appropriate for use by staff without professional education, and in developing criteria for selection of staff for educational leave. Work also continued on the Educational Standards Project in determining functions that can best be performed by staff with a professional education, a college degree, or technical training. Following a meeting of State staff development personnel in Washington in September 1961, a statement was prepared on standards of staff development common to the Children's Bureau and the Bureau of Family Services. A second meeting of State staff development personnel was planned for the fall of 1962. Planning was also initiated for regional seminars and nationwide training sessions if and when Federal funds for direct administration of training, authorized but not yet appropriated, are made available.

An advisory committee representing schools and agencies assisted the Bureau in considering the many proposals made by professional organizations, schools of social work, and individuals for academic and professional education, inservice training, and the most effective use of staff. A committee of deans of schools of social work also advised the Department on ways of increasing the supply of adequately trained personnel for public welfare. Bureau staff partic-

ipated in the American Public Welfare Association's Committee on Social Work Education and Personnel, and in various committees of the Council of Social Work Education.

About 42 States now have full-time staff development directors, and the majority of the remainder are in the process of filling this position. There are other evidences in the States that planning for achieving sound staff development programs by 1967 is well on the way, although its ultimate success will depend largely on the availability of necessary State funds for this purpose.

PROGRAM INTERPRETATION

Public interest in the assistance programs continued at an all-time high, as reflected in the greatly increased number of telephone inquiries, personal visits, requests for press information service, and incoming mail.

Requests for information were concentrated largely on the aid to families with dependent children program, and developments in specific States under the Kerr-Mills legislation and under provisions of the 1961 amendments. Other areas of great interest were: work relief, Cuban refugees, crisis situations in particular communities, Federal participation in assistance payments to patients on conditional release from mental institutions and other provisions included in the Secretary's directives, and legislative proposals subsequently incorporated in the Public Welfare Amendments of 1962. Keen interest was also expressed, largely by professional groups, in the studies about public welfare made for the Secretary.

The number of letters received directly by the Bureau was 16 per cent greater than a year earlier, and congressional inquiries forwarded to the Bureau amounted to twice as many as in the previous year. Incoming mail averaged about 2,200 letters a month—1,600 more than the normal monthly load prior to the spring of 1961.

Press releases reported progress in many program areas. Informational materials, special statements, and reports were also prepared to help meet requests for more specific information in certain problem areas.

A position of Public Information Officer was established within the Office of the Director of the Bureau to develop a program of public information on the programs for which the Bureau carries responsibility.

International Activities

Bureau staff participated in three meetings of the Committee on International Social Welfare of the National Social Welfare Assembly; in the Fourth Pan American Conference of Social Service held

in Costa Rica; and in the community-wide conference on social welfare planning held in Panama.

In cooperation with the International Service in the Office of the Commissioner, consultation was provided to UN fellows and AID participants, and leaders and specialists under the Department of State's Educational and Cultural Exchange program. With the cooperation of regional offices, training programs were also provided for international visitors, including arranging contacts to supplement academic and field work programs of those attending graduate schools of social work, providing for observation in various public and private agencies, and arranging intern-like placements.

A section on developments in public assistance and other social services was prepared for the United Nations Biennial Report on Developments in Family, Youth and Child Welfare for 1960-61; and social welfare documents developed by the United Nations Social Commission were reviewed. Research projects proposed by foreign countries were also reviewed, and projects of interest to the Bureau were submitted for consideration under Public Law 480. Review was also made of UNICEF's social service projects dealing primarily with social work education and training, urban development, and family welfare.

Children's Bureau

On April 9, 1962, the Children's Bureau was 50 years old. This anniversary gave the Bureau an opportunity to evaluate what had been accomplished for children during this half century—and to look ahead to determine goals for the next decade.

The pervasive interest in the fiftieth anniversary did not dwarf the very important changes which came about during the year, especially in relation to the new emphasis in the Bureau, the Department, and the Administration on expanding and improving health and welfare services to help children develop to their full potential and families become more self-reliant and self-sustaining. During fiscal 1962, many gains were made for children.

The legal base of the Children's Bureau for serving the children of the United States is contained in two acts. Under its basic act of 1912, the Bureau is charged with investigating and reporting "upon all matters pertaining to the welfare of children and child life among all classes of our people." The Bureau studies many types of conditions affecting the lives of children, makes recommendations to improve practices in child health and child welfare programs, and helps establish standards for the care of children.

Under Title V of the Social Security Act, as amended, the Bureau administers grants to States for three programs: (1) maternal and child health services; (2) crippled children's services; and (3) child welfare services.

A program of grants for research and demonstration in the field of child welfare was authorized under Title V, part 3, of the Act in 1960. Funds for these grants were appropriated for fiscal year 1962, and the first grants were made in the spring of that year. In 1961, the child health and crippled children's provisions were broadened to permit special project grants to be made directly to institutions of higher learning. Real progress was made during fiscal 1962 in implementing these provisions.

These then are the present purposes of the Children's Bureau today:

- to assemble facts needed to keep the country informed about children and matters adversely affecting their well-being;
- to recommend measures that will advance the wholesome development of children, and in preventing and treating the ill effects of adverse conditions;
- to give technical assistance to public and voluntary agencies and to citizens groups in improving the conditions of childhood; and
- to administer the grants appropriated each year under Title V of the Social Security Act to aid in building the health and welfare of children.

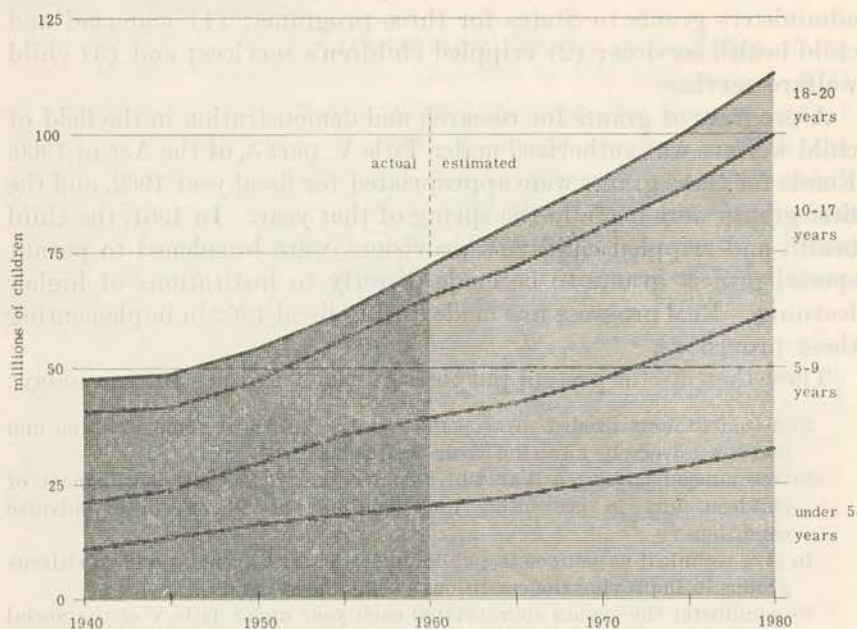
The Bureau's approach to the problems of children proceeds from a concern for the child with his family or wherever else he may live. The interrelationship between the physical, emotional, and social factors in child growth, child health, and child welfare permeates all that the Bureau does, and that it stimulates others to do, in research and action for children.

From many sources, the Children's Bureau gathers all the facts and figures that will help children's workers and citizens in the United States know the size of their wealth in children, the extent of conditions that are adverse to them, and the trends in our society affecting child life.

The population of the United States is increasing at an extraordinary rate for a country which has attained such a high level of development. The annual rate of increase since 1953 is 1.7 percent (1.0 in Japan, 0.05 percent in Great Britain). The rate of increase is close to that of India (1.9 percent), the same as that reported by U.S.S.R., and higher than European countries except Albania, Iceland, and Poland.

This phenomenon of rapid population growth in the United States is not due to immigration (271,350 in 1961), but to some increase in the size of the family and to a lengthening of the life span. The third and later children in the family make up nearly one-half of all of

CHART 16.—INCREASING CHILD POPULATION



annual births as contrasted with only two-fifths of these births in 1940. The expectation of life at birth is now 69.7 years as against 65.9 in 1945. Even if there is no further reduction in mortality below current levels, nearly one-half of the newborn today will live to at least 75 years of age and nearly a fifth to at least 85.

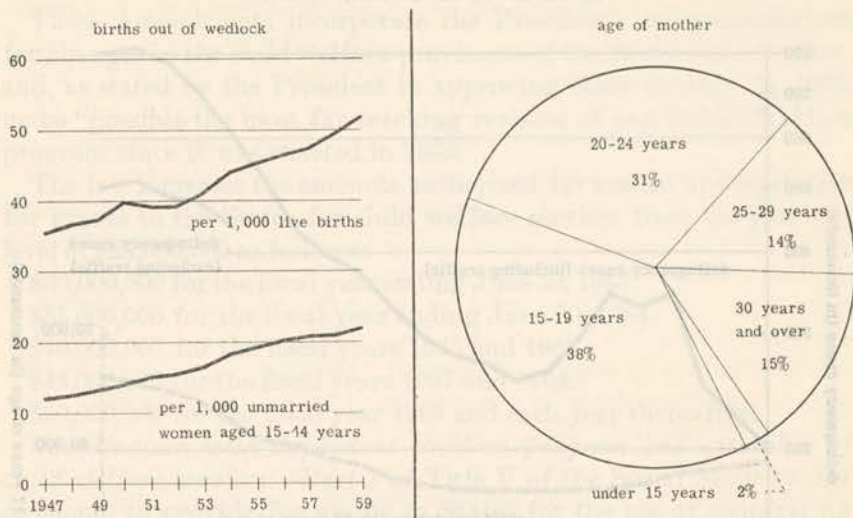
The estimated number of children under 18 in the resident population of the United States in 1961 was 65,854,000 or 36.4 percent of the total population.

Estimated birth figures for the United States counties and metropolitan areas in 1960 highlight the increasing urban character of the Nation. The national total was 4,282,000. One-third of these were born to residents of the 24 metropolitan areas with a million or more inhabitants.

Infant mortality in the United States declined in 1961 for the third successive year. The provisional 1961 rate, 25.3 per 1,000 live births, set a record low, about 2 percent under the rate for 1960, the previous low (25.7), compared with 26.4 for 1959.

There were 221,000 births out of wedlock in the United States in 1959—the highest *number* on record. This represents an increase of nearly 12,000 over 1958. One out of every 20 babies (52 out of every 1,000 live births) in the United States is born out of wedlock—the highest *ratio* of births out of wedlock on record.

CHART 17.—BIRTHS OUT OF WEDLOCK ARE INCREASING



About 40 percent (89,000) of all mothers reported as bearing children out of wedlock in a year are teenagers, and 22 percent (48,000) under 18 years of age. Of all unmarried girls aged 15-19 years, 1.5 percent bear children out of wedlock in a year, compared with a 3 percent rate for unmarried women between 20 and 30 years of age. The illegitimacy for teenagers doubled between 1940 and 1955 but has barely changed since.

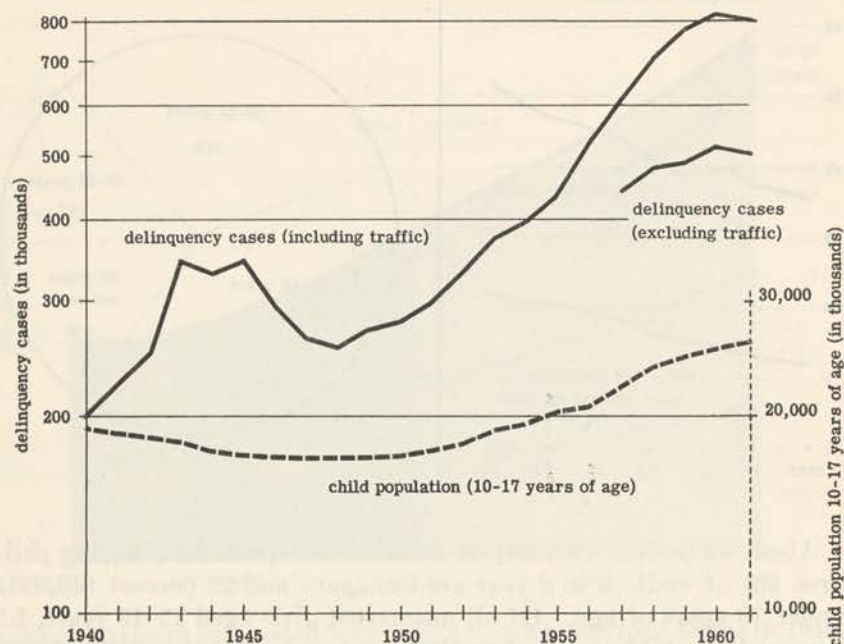
Families continue to grow larger—having risen in average size from 3.54 in 1950 to 3.71 in 1961.

On the average, families have gained in real income throughout the past decade. But in 1960, there were still 12.5 million children living in families with less than \$3,000 annual income.

For the first time in 13 years, the number of juvenile delinquency cases coming before juvenile courts showed a slight drop in 1961 (1 percent) when the child population was increasing by 3 percent.

One of the most significant social changes in this century is the great increase in the number of married women in the labor force. About 3 million mothers with children under 6 and about 5 million mothers with children over 6 are now working. Economic necessity probably is the major reason why most mothers work. The lower the father's income, the larger the proportion of children whose mother is employed. Twenty-seven percent of all children under 18 in husband-wife families whose fathers are not employed or earn less than \$2,000 a year have employed mothers; for children whose fathers earn between \$6,000 and \$10,000 a year, 18 percent.

CHART 18.—TRENDS IN JUVENILE COURT DELINQUENCY CASES AND CHILD POPULATION 10 TO 17 YEARS OF AGE, 1940-60



The total number of young men and women between 16 and 25 who will enter the labor force in the 1960's is a staggering 26 million, a volume unprecedented in our history. In 1965 alone, 3.8 million young people will become 18 years of age, an increase of 1.2 million over 1960. Large numbers of youth of this age are now and probably will continue to be unemployed and out of school.

Legislative Developments

Fiscal year 1962 saw the introduction of Administration proposals for far-reaching amendments to Title V of the Social Security Act which, if enacted, would enable the Children's Bureau to expand very substantially its services in behalf of children. These included recommendations for major changes in the child welfare provisions of the act, as part of the President's proposals on public welfare, which were enacted soon after the close of the fiscal year. They also included proposals for extending the Bureau's research authority to permit making grants or entering into other cooperative financial arrangements for research relating to maternal and child health and crippled children's services. These amendments were not acted on by Congress prior to adjournment.

PUBLIC WELFARE AMENDMENTS OF 1962

These Amendments incorporate the President's recommendations for changes in the child welfare provisions of the Social Security Act, and, as stated by the President in approving them on July 25, 1962, make "possible the most far-reaching revision of our Public Welfare program since it was enacted in 1935."

The law increases the amounts authorized for annual appropriation for grants to the States for child welfare services from the previous level of \$25,000,000 as follows:

\$30,000,000 for the fiscal year ending June 30, 1963.

\$35,000,000 for the fiscal year ending June 30, 1964.

\$40,000,000 for the fiscal years 1965 and 1966.

\$45,000,000 for the fiscal years 1967 and 1968.

\$50,000,000 for the fiscal year 1969 and each year thereafter.

Coordination with dependent children program and extension of child welfare services.—Part 3 of Title V of the Social Security Act continues to provide for grants to States for the use of cooperating State public welfare agencies in carrying out the State plan developed jointly by the State agency and the Secretary. The new law adds to these provisions, effective July 1, 1963, so as to require:

1. Inclusion in the State child welfare plan of provision for coordination between the services provided under it and those which are provided for children under the State plan relating to dependent children which is approved under Title IV of the Social Security Act.

2. A satisfactory showing by the State that it is extending the provision of child welfare services in the State, with priority being given to communities with the greatest need for such services after giving consideration to their relative financial need, and with a view to making available by July 1, 1975, in all political subdivisions of the State, for all children in need thereof, child welfare services provided by the staff (which shall to the extent feasible be composed of trained child welfare personnel) of the State public welfare agency or of the local agency participating in the administration of the plan in the political subdivision.

The new law also requires, effective July 1, 1963, with respect to day-care services (including the provision of such care) provided under the State child welfare plan that the State plan shall provide:

1. For cooperative arrangements with the State health authority and the State agency primarily responsible for State supervision of public schools to assure maximum utilization of such agencies in providing necessary health services and education for children receiving day care.

2. For an advisory committee, to advise the State public welfare agency on the general policy involved in the provision of day-care

services under the State plan, including representatives of other State agencies concerned with day care or related services and persons representative of professional or civic or other public or nonprofit private agencies, organizations, or groups concerned with the provision of day care.

3. For such safeguards as may be necessary to assure provision of day care under the plan only in cases in which it is in the best interest of the child and the mother and only in cases in which it is determined, under criteria established by the State, that a need for such care exists; and, in cases in which the family is able to pay part or all of the costs of such care, for payment of such fees as may be reasonable in the light of such ability.

4. For giving priority in determining the existence of need for day care, to members of low-income or other groups in the population and to geographical areas which have the greatest relative need for extension of day care.

Day care.—The law further provides that beginning June 30, 1962, the excess above \$25 million, up to a maximum of \$10 million, of the annual appropriation for child welfare services, shall be earmarked for the provision of day care under the State child welfare plan. (In fiscal 1963, the maximum earmarked could not exceed \$5 million since \$30 million is authorized to be appropriated for that fiscal year for all child welfare services.) Such care may be provided only in facilities (including private homes) which are licensed by the State, or are approved (as meeting the standards established for such licensing) by the State agency responsible for licensing facilities of this type.

The law adds to the section of the act, which authorizes grants for research or demonstration projects in the field of child welfare under Title V, part 3, provisions to authorize grants to institutions of higher learning for special projects for training personnel for work in the field of child welfare, including traineeships.

The definition of child welfare services for which Federal funds may be used under State child welfare plans is clarified and somewhat broadened.

No supplemental appropriation to implement the day care and training provisions of the 1962 amendments was made by the Congress before adjournment.

During the fiscal year 1962, the Congress acted upon two other pieces of legislation covering subjects on which the Bureau and the Department had been recommending legislation for several years and on which there had been considerable activity and interest on the part of Congress. These two pieces of unfinished legislative business were acted on early in the fiscal year and before the first session of the

87th Congress ended on September 26, 1961. They related to inter-country adoptions and to juvenile delinquency.

INTERCOUNTRY ADOPTIONS

In September 1961, legislation (P.L. 87-301) was enacted which incorporated in the basic immigration law provisions for nonquota visas for eligible orphans, thereby making these provisions permanent. The Department of Health, Education, and Welfare does not carry any responsibility in the administration of these provisions.

JUVENILE DELINQUENCY

In May 1961, President Kennedy transmitted to the Speaker of the House the Administration juvenile delinquency proposal. On September 22, 1961, the President approved the Juvenile Delinquency and Youth Offenses Control Act of 1961 (P.L. 87-274).

As finally enacted, the law authorizes a 3-year program, beginning with the fiscal year 1962, of: (1) grants for demonstration and evaluation projects; (2) grants for the training of personnel; and (3) technical assistance services. An annual appropriation of \$10 million is authorized for carrying out the Act for each of the fiscal years 1962, 1963, and 1964.

On September 30, 1961, the President approved a supplemental appropriation bill (P.L. 87-332) which contained an appropriation to enable implementing the new legislation immediately. The grants are administered by the Secretary's office but, under this appropriation, the Children's Bureau received funds for expanding its technical assistance services.

1962 APPROPRIATIONS FOR THE CHILDREN'S BUREAU

The amounts appropriated for the Children's Bureau for fiscal 1962 under P.L. 87-290 were:

Salaries and expenses.....	\$2,668,000
Grants for maternal and child welfare.....	69,100,000
Maternal and child health services.....	25,000,000
Crippled children's services.....	25,000,000
Child welfare services.....	18,750,000
Research or demonstration projects in child welfare.....	350,000

The budget for the Social Security Administration, in the same appropriation act, provided \$1,607,000 for research and training under the special foreign currency program. A substantial portion of these counterpart funds was for projects relating to maternal and child health. Projects relating to child welfare and juvenile delinquency are also included.

Youth Development Unit

In January 1962 Secretary Ribicoff instructed the Office of Education and the Children's Bureau to augment their services for youth. The Bureau's new Youth Development Unit was set up in the Office of the Chief. The Unit is staffed by specialists experienced in youth work, in community organization and development, and in the training of persons working with youth. The staff of the Unit is financed from funds under the Juvenile Delinquency and Youth Offenses Act of 1961. Consequently, the first priority of the Unit is to assist in the administration of the demonstration and training grant programs of the Department under the new juvenile delinquency legislation. It cooperates with other Divisions of the Bureau in stimulating research and demonstration projects; in encouraging better training of personnel; in analyzing, interpreting, and disseminating research materials; and in preparing publications related to youth development and expanding opportunities for youth. The Unit offers help to States, communities, and voluntary organizations in developing broad programs for youth.

Goals for the immediate future of this Unit are:

- To identify national problems and needs.

- To initiate broad plans for the accomplishment of objectives of P.L. 87-274.

- To develop consultative relationships with national and local leaders in fields affecting youth.

- To develop guides, standards, and recommendations for use in planning special youth development programs and services.

The Interdepartmental Committee on Children and Youth

Within the Federal Government, 36 agencies have programs concerned with children or youth. The Interdepartmental Committee on Children and Youth was established to coordinate related efforts of these agencies and to serve as the Government's liaison with national organizations and State committees for children and youth. The Chief of the Children's Bureau is Acting Chairman of the Committee, by delegation of the Secretary of Health, Education, and Welfare, who is its Chairman. The Bureau also provides the secretariat for the Committee.

Through its monthly program meetings and the work of its subcommittees, the Interdepartmental Committee keeps in touch with all programs affecting the Nation's children and youth, identifies problems which are outside the responsibility of any one agency, and encourages collaborative action. For example, the Subcommittee

on Community Services for Selective Service Registrants is initiating demonstration projects under which young men not accepted for military service because of physical or educational limitations are referred to community resources to help them become qualified members of the labor force and of society. Ten Federal agencies are involved in this project.

During fiscal 1962, the Interdepartmental Committee studied a number of major new Federal programs and agencies relating to youth, including the Peace Corps, the President's Committee on Juvenile Delinquency and Youth Crime, the Area Redevelopment Administration, and the Manpower Development and Training Act of 1961. In addition, the Committee gave special attention to changes affecting the lives of rural youth; Federal programs to provide equality of opportunity in housing, education, health, and employment for Negroes and their children; and migrant and welfare legislation pending before the Congress.

The National Committee for Children and Youth

Both the Interdepartmental Committee on Children and Youth and the Children's Bureau have close working relationships with the National Committee for Children and Youth in its efforts to implement followup of the 1960 White House Conference on Children and Youth. The Chief of the Bureau serves as Vice Chairman of the National Committee.

The most notable event for the National Committee in fiscal 1962 was the Fifth Joint Conference on Children and Youth held April 10-12 to consider ways of creating experience opportunities for youth to achieve a more responsible role in our society. This Conference was sponsored by the National Committee for Children and Youth, the National Council of State Committees for Children and Youth, the Council of National Organizations for Children and Youth, and the Interdepartmental Committee for Children and Youth.

Services to State Committees for Children and Youth

The Interdepartmental Committee and the Children's Bureau also work jointly to provide consultation and other services to the 45 statewide committees for children and youth. Regional representatives of member agencies of the Committee are called on increasingly to give technical consultation to the State committees. In addition, in September the Children's Bureau appointed a special consultant on mobilization of community resources to work with regional

staff of various Federal agencies through Children's Bureau regional staff and directly with State committees.

As a result of several workshops held last year, most State committees now include representatives of the State affiliates of the national voluntary agencies which serve children and youth.

The Interdepartmental Committee continues to supply publications, reports of new research findings, program aids, and other informational materials to the State committees as these become available through Federal agencies, universities, voluntary groups, and industry. The Committee also serves as a clearinghouse for the exchange of reports of State committees.

United Nations International Children's Fund (UNICEF)

June 1962 marked the end of the first year of an expanded program of aid by UNICEF, designed to give countries an opportunity to seek aid for their highest priority needs.

Several projects for vocational training of out-of-school youth were approved, all in the Americas. The first was an urban project in Mexico involving housing improvement, environmental sanitation, and vocational guidance and training in several shantytown areas of Mexico City. The project was built upon self-help activities already begun among the inhabitants.

Aid for primary and secondary education, with special emphasis on training of teachers, was sought and approved for the first time. This type of aid is expected to be sought increasingly by the developing countries. The first of these projects is in Africa.

The social service program which got off to a slow start in 1959 has gained momentum. Twenty-one family and child welfare projects were approved this year, bringing the total to 43. Requests in this field are expected to increase to about \$2 million by 1964.

Dr. Katherine Bain, Deputy Chief of the Bureau, acted as a special advisor to the Executive Board of UNICEF at its sessions. The U.S. delegation was headed by Mr. Fred DelliQuadri. The June meeting of the Board centered around the theme, *Planning for Children in National Development*. UNICEF is prepared to assist countries in reviewing their needs and in developing long-range plans to meet them as part of their social and economic development.

Civil Defense

Under contract with the Office of Civil Defense, the Children's Bureau developed two reports on shelter care—*Maternal and Newborn Care in Fallout Shelters* and *The Care of Infants and Children in*

Fallout Shelters. Nine temporary staff members prepared these reports, under the direction of the Deputy Chief. They were then reviewed by Children's Bureau staff and by two panels of consultants. The final documents were sent to the Department of Defense for use in establishing guidelines for the care of mothers and children in community fallout shelters. Recommendations for community stockpiling of food and equipment were also included.

Programs of the Bureau

RESEARCH IN CHILD LIFE

The Bureau's research staff has a major responsibility for carrying out the legislative mandate "to investigate and report upon all matters pertaining to the welfare of children." In addition to its own studies and cooperating in joint studies, the Bureau stimulates other agencies to undertake research in child life by formulating questions needing study, developing research methods, and providing technical assistance.

Technical Research

Some of the technical research studies carried on by the Bureau follow:

1. *Childhood Morbidity.*—The National Health Survey is yielding data on childhood morbidity on a broad national basis. These have been made available to the Children's Bureau for analysis and preparation of a joint report. The data are obtained on a sample basis by means of household interviews.

In the 2-year period beginning July 1959 and ending June 1961, the National Health Survey data show that there was an average of 11 days each year per child under 15 in which, because of illness and injury, children were unable to engage in as much activity as they usually did. Almost 5 of the 11 days were spent in bed. This restriction of activity was caused by both acute and chronic illnesses and included the number of days spent by children in hospitals.

The outstanding characteristic of acute conditions among children is their high incidence. For the year ending June 1961, which was probably a typical year, the Survey found 169,891,000 acute conditions among children under 15, or a rate of 297.1 per 100 children; that is, three episodes of acute illness per year for every child. Of the acute conditions reported, respiratory conditions were by far the largest single group. Days lost from school because of acute conditions averaged almost four per child.

Injuries are frequent in children. For the 2-year period July 1959 through June 1961, the average annual number of children injured

was 18,904,000, which is at the rate of 30.5 per 100 children, or almost 1 injury per year for every 3 children.

Of all the children who suffered injuries, one-third were in the 5-9 age group. More than half of the injuries to all children under 17 were home accidents, either inside or outside the home. Injuries caused an average loss from school of 3.9 days for all children 5-16 suffering injuries.

2. Children with Phenylketonuria in Maternal and Child Health and Crippled Children's Programs.—The Bureau is planning a cooperative followup study of children with phenylketonuria which will invite the participation of all mental retardation clinical programs and other maternal and child health and crippled children's programs which provide for dietary treatment of phenylketonuric children.

Preparatory to planning this followup study, the Bureau investigated the number of children with this condition likely to be available for study. An inventory was taken by means of questionnaire to find out the location, age, and current treatment status of children diagnosed as having phenylketonuria in clinical programs for mentally retarded children from 1957 through 1961.

There is general agreement that early detection of phenylketonuria and treatment in the early months of life offer a reasonable chance of preventing mental retardation. However, sufficient information is not available to substantiate agreement on effectiveness in relation to age and intelligence level of the child at the time treatment is initiated; or the optimal length of time treatment should be continued; or the factors that determine the success or failure of the child or his family in adjusting to the diet.

3. Board Rates and Related Costs of Foster Care for Children.—The Children's Bureau has long been interested in the cost of providing child welfare services. Work is in progress on the development of a questionnaire to State public welfare agencies concerning current board rates and other costs of foster family and institutional care of children. Within the past year, there has been much interest in current costs, in connection, for example, with the Federal program for unaccompanied Cuban refugee children and with consideration of public policy concerning purchase of care from voluntary agencies.

4. Studies of Unmarried Mothers.—Because of special interest of the Committee on Appropriations of the House of Representatives in increased use of Federal funds for child welfare services to strengthen programs for young unmarried mothers, the Bureau undertook to assemble facts from States on services now provided by public and voluntary child welfare agencies, needs not being met and plans for improving services. Information was obtained from 52 State depart-

ments of public welfare. One conclusion of the study is that increased service to unmarried mothers from public child welfare agencies is clearly needed in at least two-thirds of the States.

In addition, the Bureau has reviewed a great many research studies and demonstration projects in order to determine what we do and do not know about problems relating to births out of wedlock. A report of this review is now in process. It will serve as background to recommending projects and priorities for research, for demonstrations, and for programs.

5. *Characteristics of Children Receiving Child Welfare Services.*—A national sample study of the problems and characteristics of children and the services they receive from public and voluntary child welfare programs was launched in the spring of 1961 with the cooperation of the Child Welfare League of America.

6. *Perinatal Mortality.*—In a special study of data on perinatal mortality (fetal deaths in pregnancies of 20 or more weeks duration and neonatal deaths), the 1959 U.S. rate of 34.6 perinatal deaths per 1,000 births was the lowest recorded, thus resuming the gradual downward trend in rate which prevailed prior to the interruption by a rise in 1958 to 35.4. In comparison to a decade ago, 1959's perinatal mortality rate is down 14.6 percent. The relative improvement was larger in the fetal death rate, 18.1 reduction from 1949's rate, than in the neonatal death rate, which decreased 11.2 percent.

Statistical Reports

During the year, the Bureau compiled and published current statistical data received from State agencies administering the maternal and child health, crippled children's, and child welfare programs. It also published data on mental retardation clinics, services in public and voluntary child welfare programs, public child welfare personnel, geographic coverage of public child welfare service, adoption, day care, juvenile court statistics, institutions for delinquent children, juveniles waived by juvenile courts to criminal courts.

Research Interpretation

Public inquiries showed pretty much the same trend they have for the past few years—more from students, less from parents.

A fact sheet was prepared on *Working Mothers and Day Care Services in the United States*. Revisions of *Your Child from Six to Twelve* and *Infant Care* were underway.

A special listing of 477 research projects on juvenile delinquency entitled *Research Relating to Juvenile Delinquency* was published by the Bureau's Clearinghouse for Research in Child Life.

HEALTH SERVICES FOR MOTHERS AND CHILDREN

Beginning July 1, 1961, appropriations for both maternal and child health and crippled children's services were increased to \$25 million, the full authorization for each program. This action by the Congress was crucial not only to the further development of these programs but even to the maintenance of their present level.

The 1960 Social Security Amendments authorized grants directly to institutions of higher learning as well as to State agencies for special projects of regional or national significance in maternal and child health and crippled children's services.

Currently, grants are going to institutions of higher learning to help in financing training in maternal and child health for maternity and pediatric nurses, medical social workers, and nutritionists; training in audiology; projects and demonstrations concerned with evaluation of child health conferences; prosthetic research; children's rehabilitation centers; regional congenital heart centers; care for children with epilepsy; a study of hard-of-hearing preschool children.

Out of these grants come more people skilled in working with mothers and children in many places outside the States receiving the special grants, and new and better services for children.

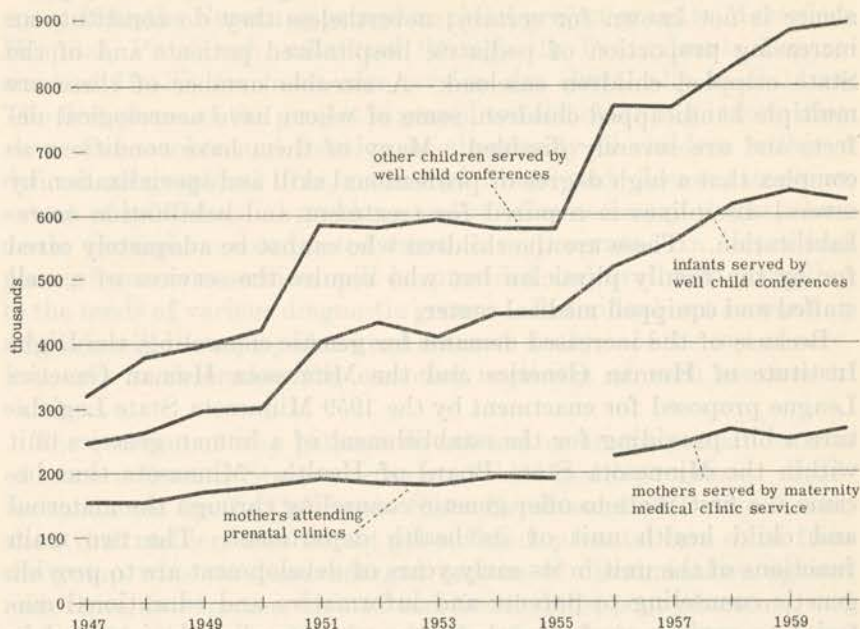
Maternal and Child Health Programs

All States, the District of Columbia, Puerto Rico, the Virgin Islands, and Guam received Federal funds to improve services for promoting the health of mothers and children.

Maternal and child health programs continue to broaden and expand. During 1960, 267,000 expectant mothers were provided with medical, prenatal, and postnatal clinic services. Medical and hospital care were provided 38,000 mothers who had complications of pregnancy. Care in hospital premature centers was provided 10,073 premature infants. Well child conferences served over 1,500,000 babies and preschool children. Nurses gave a hand to the mothers of 3,412,693 children through home visits. School children received over 2,395,000 medical examinations. Some 2,557,000 children were immunized against smallpox; 3,594 against diphtheria; 5,818,000 against polio; 2,476,000 against whooping cough; and 3,778,000 against tetanus. Over 7 million children were given screening tests of vision; over 4 million tests of hearing.

Progress is being made in services to mentally retarded children for which \$1 million of the \$25 million appropriation is earmarked. Forty-six States are providing some special direct clinical services to retarded children and their families. Special clinical programs served over 12,000 such children in 1960. Training of medical personnel in

CHART 19.—MATERNAL AND CHILD HEALTH SERVICES ARE REACHING MORE PEOPLE



this field was increasing; some 4,500 medical students have received training through use of these special clinics; over 25,000 public health nurses have received some orientation in working with mentally retarded children and their families.

A broad-scope screening program for detection of phenylketonuria, financed by a Children's Bureau grant, is underway in hospitals in more than 30 States. Designed to test the effectiveness of routine screening of newborn infants as a regular part of hospital procedure, the program is expected to encompass over 400,000 children during the coming year.

The Bureau has also completed an inventory of children with phenylketonuria as a basis for its followup study of the effects of dietary treatment on the mental development of PKU children. (See p. 100.)

The changing picture of medical care of children has resulted in new challenges as well as new problems for health personnel. Whereas formerly children suffered from predominantly environmental, often acute, conditions (especially infectious and nutritional diseases, and accidents), an increasing number now suffer from genetic or partially genetic diseases or conditions produced by birth trauma—conditions which are usually present at birth, chronic in nature, and may require life-long therapy.

Whether congenital anomalies are increasing in incidence or prevalence is not known for certain; nevertheless they do constitute an increasing proportion of pediatric hospitalized patients and of the State crippled children caseload. A sizeable number of these are multiple handicapped children, some of whom have neurological defects and are severely disabled. Many of them have conditions so complex that a high degree of professional skill and specialization by several disciplines is required for treatment and habilitation or rehabilitation. These are the children who cannot be adequately cared for by the family physician but who require the services of a well staffed and equipped medical center.

Because of the increased demand for genetic counseling, the Dight Institute of Human Genetics and the Minnesota Human Genetics League proposed for enactment by the 1959 Minnesota State Legislature a bill providing for the establishment of a human genetics unit within the Minnesota State Board of Health. Minnesota thus became the first State to offer genetic counseling through the maternal and child health unit of its health department. The two main functions of the unit in its early years of development are to provide genetic counseling to parents and informative and educational material to various professional groups who are directly involved in human genetic problems.

An increased awareness of the need for expanded pediatric services among a number of States is evident. Not only are the States recognizing this activity as a necessary component of services for mothers and children, but they are recognizing the need to extend and improve its scope and coverage.

In Kentucky, pediatric clinics are being organized and conducted in cooperation with the Pediatric Department of the University of Kentucky Medical Center.

In spite of economic difficulties, West Virginia has expanded its services to children. In order to meet the needs of children with long-term illness and crippling conditions, the State health department's maternal and child health program has established pediatric centers offering diagnostic, evaluation, hospitalization, and followup services. Home care services are also offered to the child confined at home.

In North Carolina, general clinics have been developed in many of the counties, and efforts are now being directed to developing pediatric screening clinics to evaluate children with defects and refer these to supporting services and special clinic services, such as developmental and evaluation clinics.

The needs of chronically ill children for home care services are of special concern to the Children's Bureau. In an effort to gain greater

insight into these services and to stimulate interest in them, in February 1962, the Bureau approved a special project grant to Montefiore Hospital, Pittsburgh, submitted through the Pennsylvania Department of Health for home care services for chronically ill children. The first phase of the project is geared toward obtaining information about the number and location of chronically ill children within a defined geographical area, nature of illness and disease categories, extent of related social problems and services necessary to meet these needs through a coordinated home care program. In the second phase, home care services will be provided and evaluated according to the needs of various diagnostic groups. Individual cost accounting methods will be employed toward accurate analysis of the cost of services and to determine the essential requisites of such services to children.

The question of why patients do not seek or accept prenatal care is of concern to many State maternal and child health programs. Studies conducted by the California State Department of Public Health show that mothers who do not get sufficient prenatal care come from the group who are disadvantaged because of discrimination against minorities, low income, lack of vocational skills, poor education, and undesirable living conditions. Similar findings have been reported in New York City in a study of deterrents to prenatal care, particularly for the unmarried mother; by the Philadelphia Health Department; and in Washington, D.C.

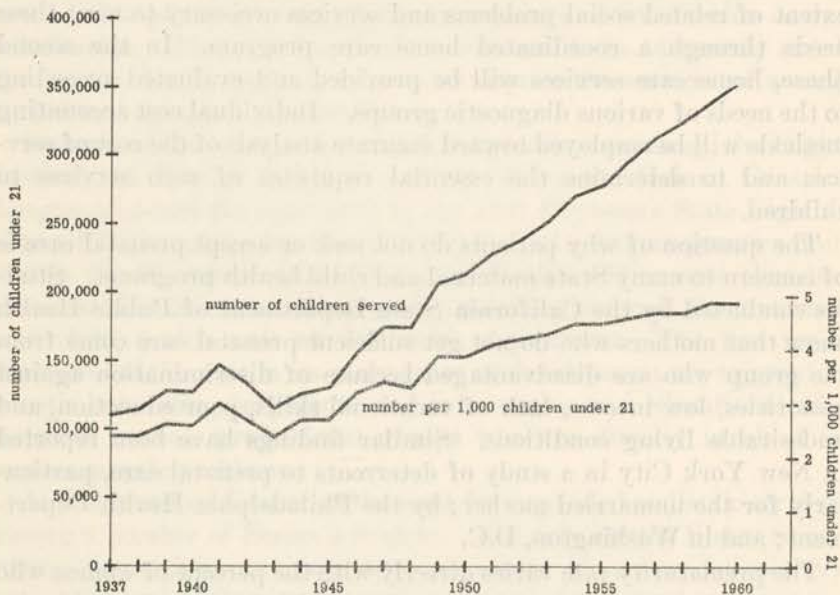
The prematurity rate varies directly with the percent of women who receive little or no prenatal care. In the District of Columbia for example, the prematurity rate was 22.7 percent among women who had had no prenatal care as compared with 10.4 percent among those who had some prenatal care.

A growing trend in many areas of the country is the increasing coordination and integration of health, social welfare, and education programs for children. The basic stimulus has come from the complex nature of unsolved problems relating to children. Attention today is focused on the child with multiple handicaps, the refugee child, the juvenile delinquent, the unwed mother, the mentally retarded child, etc. All of these represent groups not served by any one agency or discipline. Present knowledge concerning these groups is not limited to a few professional areas. In serving these children, most communities seek the maximum professional effort from each worker for the child who needs services, without too much concern as to the worker's place in an administrative organization. This attempt leads to improved coordination and integration of programs.

Crippled Children's Services

All States (excepting Arizona), the District of Columbia, Puerto Rico, the Virgin Islands, and Guam participated in the crippled children's program during fiscal 1962.

CHART 20.—TREND IN THE NUMBER OF CHILDREN SERVED IN THE CRIPPLED CHILDREN'S PROGRAM AND IN THE NUMBER PER 1,000 CHILDREN UNDER 21, 1937-60



State crippled children's programs provided care in 1960 to 355,000 children with many different impairments. About 17 in every 100 received hospital care and each of them averaged about a 3-week stay in the hospital. Averaging a little more than 2 visits each, 271,000 children came to clinics. About 79,000 children were seen by physicians during office and home visits. For every 1,000 children under 21 years of age, 4.9 children were receiving care under these programs.

The majority of the children in the program had nonorthopedic defects. States continued to broaden their programs to include such handicapping conditions as cystic fibrosis, nephrosis, epilepsy, hearing, and certain neurological defects.

The largest single group of children (about 100,000) who received diagnostic treatment and rehabilitative care in 1960 were children with impairments at birth. The program now includes children for whom medical or surgical care formerly was not available or feasible.

In fiscal 1960, 16,784 children with congenital heart disease were served by the crippled children's program. All States with the exception of three gave services to such children for diagnosis, treatment, or surgery.

Of special significance is the development of a project by the California State Department of Health, financed with a grant from the Children's Bureau, to study the immediate and long-term results of current methods of treating congenital heart disease. The California crippled children's program is in a unique position to carry such a study in view of its extensive experience in providing care for 5,000 children with congenital heart disease in 1959-60 of whom 1,000 were hospitalized for diagnosis and treatment.

The Children's Bureau is working with the Pennsylvania State Department of Health in the development of a plan for care of infants born with congenital anomalies that are incompatible with life in a special unit at the Children's Hospital, Philadelphia. Care will be available to infants from the Philadelphia area and southern New Jersey. Such a service will contribute appreciably to the reduction of neonatal mortality and to the early correction of seriously crippling conditions. This program will serve as a prototype for other services.

There is growing interest on the part of departments of pediatrics in medical schools in organizing special centers for the diagnosis and long-range treatment and counseling of children with multiple handicaps. These centers are being developed for the training of pediatricians, medical social workers, nurses, and others concerned with this complex and growing problem. Four such projects are now receiving grants from the Children's Bureau.

The keystone to further progress in maternal and child health programs lies in the broader distribution of services to groups of mothers and children who are barely or inadequately reached. These services are still lacking or inadequate in many areas and for some socially and economically deprived groups in cities.

CHILD WELFARE SERVICES

Fiscal 1962 heralded a solid breakthrough for child welfare services. The imminent passage of the 1962 Public Welfare Amendments at year's end furnished tangible evidence of the Nation's determination to underwrite on a long-range basis the orderly improvement and extension of child welfare services to all children in need of them.

Research and Demonstration Projects in Child Welfare

The first grants were awarded to 16 projects totaling \$219,413 by the Chief of the Children's Bureau on June 29, 1962, under the child welfare research and demonstration grant program originally authorized by the 1960 amendments to part 3, Title V, of the Social Security Act. Funds to put the program into operation became available with passage of the Appropriation Act of 1962. Immediately upon Presidential approval of the Appropriation Act, policies and

procedures for administering the new program were issued, personnel employed, and announcements of grant availability widely distributed by the Bureau.

Subject matter of the approved projects falls within the following areas: adoptions, rehabilitation, services to children in their own homes, day care, foster care, unmarried mothers, mentally retarded children, emotionally disturbed children, staff utilization, and educational materials and methods. Eight of the grants went to institutions of higher learning, six to voluntary agencies, two to public agencies.

Teamwork To Improve Child Welfare and Family Services

Federal administrative and legislative developments in public welfare since December 1961 greatly accelerated the pace of joint planning and collaboration between the Children's Bureau and the Bureau of Family Services. Late in January 1962, regional child welfare staff of the Children's Bureau came to Washington for the meeting called by the Commissioner of Social Security with State welfare administrators. This provided an opportunity to bring staff of both agencies up to date on the new public welfare administrative and legislative proposals as well, and to consider the implications for both programs.

During the last quarter of the fiscal year, Children's Bureau staff participated in regional office meetings held by the Bureau of Family Services for discussion of handbook materials on staff development and provision of social services for public assistance recipients.

Regional representatives of both agencies were considering together an increasing number of broad State matters relating to these programs. These include questions of State agency structure and organization, merit systems, and staff development.

Two joint publications were developed during the year. The demand for the pamphlet *Unmarried Parents: A Guide for the Development of Services in Public Welfare* was widespread and came from a wide range of groups and individuals, including judges, lawyers, ministers, physicians, housing authorities, and religious organizations. The second publication, dealing with staff development, will be published shortly. It is the end product of many meetings held by a special joint work group on training.

Financing the Ongoing Child Welfare Program

A sizeable increase was made in the Federal grant-in-aid appropriation for child welfare services in fiscal 1962—from \$13,666,000 to \$18,750,000.

No funds were reallocated during the year because of the small amount released by the States in relation to the amount requested under this procedure. Only 1 State released \$8,176 and 19 States requested additional funds in the amount of \$364,000. Consequently, the percentage of funds left in the Federal Treasury at the end of the year remained consistently low—only 0.6 percent.

On a nationwide basis, State and local funds expended for child welfare services almost doubled between 1953 and 1961. Expenditures for such purposes rose from \$112,999,000 to \$210,400,000. While the actual percentage increases have varied from year to year, the overall trend has been for increased State and local expenditures for the child welfare program.

Improvement in Child Welfare Services

Under Federal legislation still pending at the end of the fiscal year, the ceilings authorized for annual appropriations for child welfare grants would be increased gradually from the present \$25 million to \$50 million by 1969 to provide a wider range of constructive welfare services for children. A specified portion of the additional money would be used to encourage the establishment of day care facilities and services (see page 93 for other provisions).

These provisions hold great promise for progress in improving both the availability and scope of child welfare services.

Steps To Meet Continuing Staff Shortages

Over the course of the year, the Children's Bureau and the Bureau of Family Services have continued their joint efforts to stimulate schools of social work to expand their training possibilities. Schedules returned from the States on a joint project in field instruction resources and potentialities are presently being reviewed. In another approach to improve the quantity and quality of welfare staff, Washington and regional staff of the Bureau held an exploratory meeting with schools of social work in the Boston area to discuss ways in which the level of staff in the State agencies can be improved as well as the more general needs for trained social work manpower.

Some gains were made by States in raising salary levels for child welfare positions and in liberalizing educational leave provisions. Generally good progress was also made in increasing the number of State supervisory and consultant staff, particularly Connecticut, Massachusetts, New Hampshire, Georgia, Tennessee, South Carolina, New Mexico, Oklahoma, Wyoming, and Montana.

Changes in State Structure for Services

Much State activity during the year was directed toward program reviews and reorganizations of varying degrees of magnitude. Such

planning was in process or completed in 12 States in 7 of the 9 DHEW regions. In eight of the States, the changes were internal and geared toward improving the public child welfare program itself. In the remaining four States, the changes related to plans which would provide services to families and children through a combined administrative structure.

Development of Child Welfare Services in Specialized Areas

The report of the House Appropriations Committee (House Report No. 392, 87th Congress, 1st Session) expressed the concern of the Congress over the fact that a "thriving black market in babies . . . is made possible to a large extent by the lack of decent programs for unwed mothers and their children." The Children's Bureau was instructed to "use a portion of the increased funds in fiscal year 1962 to get effective programs started to deal with the problem better"

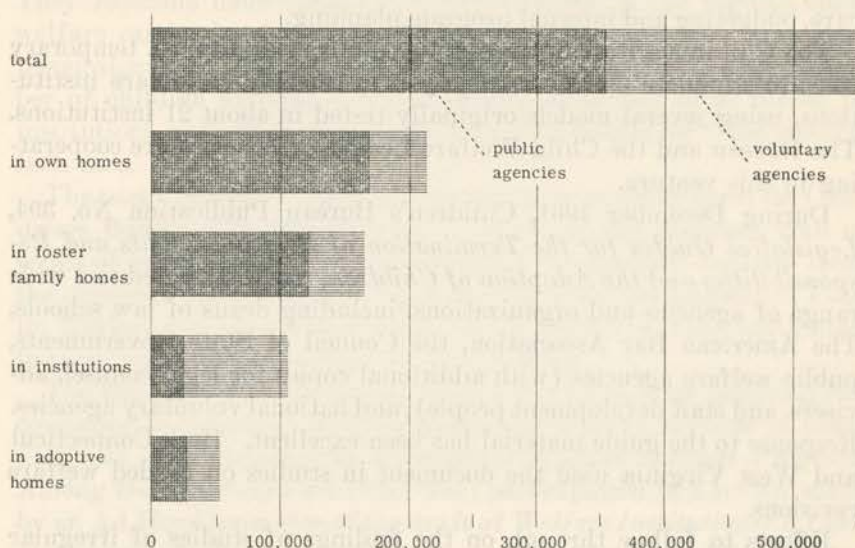
The Children's Bureau accordingly moved ahead to obtain as solid an informational base as possible to implement the congressional intent. A special questionnaire was sent to the States requesting data on services available for unmarried mothers, gaps in services, and plans proposed to meet these gaps. A report based on these findings was sent to Congress in January 1962.

Responses from the State departments of public welfare indicate their plans include extension of services for unmarried mothers and their babies through the use of regular child welfare service funds by such means as: additional professional training of staff, workshops and informal in-service training activities, publications of special materials, and efforts to improve cooperation among agencies.

However, States vary greatly in the types and availability of services provided unmarried mothers and their babies. Residence requirements limit care in some States. Help in meeting medical expenses, or paying for "shelter care" during pregnancy, is available through the public child welfare agencies in every county in only about half of the States. The lack of facilities and services for Negro unmarried mothers is a most serious problem.

Neglect and abuse of children constitute one of the most difficult and challenging problems for child welfare. In October 1961, the Children's Bureau took steps to consider the responsibility of the Federal Government in relation to children who are seriously abused or physically injured by their parents. In January 1962, an ad hoc meeting was held with representatives of various disciplines interested and active in working on this problem. A meeting in March with a second group of consultants focused on steps which could be taken to control child abuse. This group recommended the establishment of legal machinery in all States making mandatory the reporting

CHART 21.—CHILD WELFARE AGENCIES PROVIDE SOCIAL SERVICES FOR CHILDREN



by physicians and certain hospital administrative personnel of cases of suspected physical abuse of children by adults. The proposed statute would relieve such an individual reporting from civil liability.

The long-term goal for child welfare continues to be the maintenance of adequate family life for every child. During the past 6 months, State public welfare agencies have been actively engaged in assessing how they could best make use of special Federal funds for day care, one of the ways to maintain family life for children in today's society. Through these funds, every State would be able to begin immediately to develop a variety of these services—not only for the care and protection of children whose mothers work, but also as a preventive to full-time placement. A broadly representative Ad Hoc advisory committee was called together by the Children's Bureau in May 1962 to explore the new proposals for day care.

Requests for technical consultation to assist States in this planning have intensified. The report of the National Conference on Day Care for Children held in Washington in November 1960—*Day Care Services: Form and Substance*, jointly sponsored by the Children's Bureau and the Department of Labor—has proved very helpful in this connection. It has been widely distributed and the demand for it continues to be brisk.

States are reporting a mounting number of children coming into care as the result of family disruption. Although millions of dollars are invested annually in the care of children outside of their own homes, no uniform cost accounting methods have been developed or

accepted for use in the purchase of care, comparisons of costs of foster care, budgeting and internal program planning.

The Children's Bureau has employed a consultant on a temporary basis to stimulate use of cost analysis methods in child care institutions, using several models originally tested in about 21 institutions. The Bureau and the Child Welfare League of America are cooperating in this venture.

During December 1961, Children's Bureau Publication No. 394, *Legislative Guides for the Termination of Parental Rights and Responsibilities and the Adoption of Children*, was distributed to a wide range of agencies and organizations, including deans of law schools, The American Bar Association, the Council of State Governments, public welfare agencies (with additional copies for legal counsel, advisers, and staff development people), and national voluntary agencies. Response to the guide material has been excellent. Both Connecticut and West Virginia used the document in studies on needed welfare revisions.

Efforts to follow through on the findings of studies of irregular adoptions, as well as improvement of adoption laws generally, continued to be very much in the foreground among States on the west coast. The adoption program of the New York City Department of Welfare, financed by Federal child welfare services funds, completed its first full year of operation in December 1961, involving consideration of some 1,500 adoptive situations.

Two Federal developments during the year coalesced to accelerate the expansion of social services for mentally retarded children and their families: hearings held in various communities by the President's Panel on Mental Retardation to study the Nation's needs and make recommendations in local, State, and Federal action, and the announcement of grants for research and demonstration projects in child welfare.

Special interest was shown in setting up demonstration projects for mentally retarded children in the areas of foster family care, day care, development of the capacities of such children, and group therapy under the new grant program.

Public responsibility for the administration and support of day care centers for retarded children was extended to several additional States during the year (California, Connecticut, Maryland, Minnesota). Some eight States now make such provisions. Voluntary national agencies are also exploring the possibilities of this type of service for retarded children.

As the program for Cuban refugee children has moved into a more regularized phase and as the characteristics of the children arriving have changed, new aspects in planning have had to be considered. By

the end of May, 3,773 children were being cared for in 34 States. They resemble more closely now the children in the regular child welfare caseloads of public agencies over the country. Some have physical, mental, and emotional handicaps. Because of the large number of children arriving, over 75 percent have had to be placed in institutions, until foster homes can be made available for those needing such care.

The past 6 months brought greatly increased pressure upon the Children's Bureau with regard to the demands of this program, both in terms of policy decisions and in handling the flood of inquiries from the public and the Congress. The Florida State Department of Public Welfare and the voluntary agencies have been and are continuing to carry heavy responsibilities for the program.

The Bureau's child welfare specialist in civil defense planning has continued to cooperate with the Bureau of Family Services in planning and implementing the Emergency Welfare Services Program. Among the significant activities was: participation in a review made by an Ad Hoc Committee of the draft of *Welfare Institutions: A Civil Defense Guide for Fallout Protection of Population and Staff*; preparation of guides used by a survey team for a preliminary review of *Community Readiness to Provide Emergency Welfare Services* in eight selected cities, and assisting in consideration of the roles and interrelationships of public and voluntary agencies in the new national civil defense program.

Child welfare programs in 1961 fell far short of reaching all of the children with emotional and social problems with which social workers could help. Few States had programs geared to give the range and competence of service required to meet the needs of children. But the pending Federal legislation provides the opportunity for States to work realistically toward the goal of more well-trained workers and the richer variety of services so greatly needed.

JUVENILE DELINQUENCY SERVICE

Juvenile delinquency continues to be of great public concern. Our increasingly complex society intensifies the need for well-coordinated programs in this area.

The national concern about this problem has stimulated requests coming to the Bureau for various types of technical consultation, survey work, and guide material. The urgency of the juvenile delinquency problem in States and communities is pressing on State and local agency administrators and their personnel, as well as the general public, to seek effective techniques to alleviate the situation. A greater number, as well as variety, of requests have been received by the Bureau during fiscal 1962.

1. State legislative commissions have asked for standard setting material on training schools, detention centers, courts and law enforcement agencies, community organization and training. They have also asked the Bureau for on-the-spot consultation on services for delinquent children and for help with surveys of statewide services for these youth.

2. State departments responsible for delinquency control have asked the Bureau for similar types of assistance. Individual training schools, police departments, and detention programs have requested more specific types of help, such as suggestions of appropriate in-service training programs and how to implement such training; how to organize an institution or department to cope with the increasing number of children brought to their attention.

3. Communities experiencing a high incidence of problems with adolescents have turned to the Bureau for help on developing more effective leisure time programs, and exploring the various ramifications of school dropouts and employment and work programs for youth.

4. Schools of social work have requested consultation on delinquency problems and their implications for curriculum development.

5. The President's Committee on Juvenile Delinquency and Youth Crime has requested various types of help from the Bureau as the Committee established criteria to implement the Juvenile Delinquency and Youth Offenses Control Act. Their requests related to the Bureau's Division of Juvenile Delinquency Service staff making site field visits to appraise the degree of community commitment to planning a comprehensive delinquency prevention program; to their readiness to receive a planning grant; analysis of projects received by the President's Committee; technical assistance to schools of social work, agencies and communities requesting grants; and consultation relative to the knowledge and experience required by the Juvenile Delinquency Division Service staff since its establishment.

6. Many requests have come to the Bureau from foreign visitors and agencies for orientation and interpretation of this country's juvenile delinquency control programs.

The Children's Bureau met 1,043 requests for consultation on juvenile delinquency during fiscal year 1962. Of these requests, 568 were made from the field. The remaining 475 were through office consultation or by letter. In addition, the staff of the Division participated as speakers, leaders, or panel participants in workshop groups at national, State, and local meetings throughout the country. Requests for surveys and consultation far exceeded the Bureau's resources to meet them.

The past year saw the completion of a pioneer standard setting document in the law enforcement field—*Police Work with Children*:

Perspectives and Principles. This publication was developed in cooperation with the International Juvenile Officers Association, the International Association of Women Police, the National Council on Crime and Delinquency, the National Police Officers Association of America, and the National Sheriff's Association.

In the institutional field, the standard setting document, *Institutions Serving Delinquent Children: Guides and Goals*, was revised with the participation of the National Association of Training Schools and Juvenile Agencies. *A Theoretical Study of the Cottage Parent Position and Cottage Work Situations* was published in the Bureau series *Juvenile Delinquency: Facts and Facets*.

An annotated and classified compilation of Children's Bureau publications on juvenile delinquency was published. A training publication, *Training for Juvenile Probation Officers: The Report of a Workshop*, is in press. A community organization publication, *Community Planning to Prevent Juvenile Delinquency*, is underway.

INTERNATIONAL ACTIVITIES

International Research (Foreign Currency Program)

Under section 104(k) of P.L. 83-480, The Agricultural Trade Development and Assistance Act of 1954, as amended, funds were made available for research in health and other fields in specified countries. For fiscal year 1962, the Social Security Administration appropriation for international research was \$1,607,000 of which \$992,000 was for maternal and child health; \$7,000 for medical care for the aged; and \$608,000 for social welfare. The latter sum includes child welfare and juvenile delinquency. These funds were made available in August 1961, to be used in six countries—Israel, India, Pakistan, Poland, United Arab Republic, and Yugoslavia. Funds were approved in August 1961 and made available for use in the countries in December 1961.

The Bureau participated in the development of a manual, *Guide and Instructions for the P.L. 480 International Research Program in Social Welfare and Maternal and Child Health*, issued by the Social Security Administration in December 1961. Program areas were described, instructions given for submitting research proposals, and general requirements of the grant program stated.

Visits were made to five of the six countries by representatives of the Children's Bureau and the Social Security Administration to explain the program, meet with representatives of governmental, voluntary health and social agencies, and of medical schools, schools of public health, and schools of social work. These visits provided the staff with an opportunity to see something of these countries, their problems and programs, to meet and talk with outstanding national

and international workers as to research interest and possibilities for cooperative research undertakings.

The response in the number of research proposals submitted has been good. Eight proposals were received from Israel in maternal and child health and one from Pakistan during fiscal year 1962. Of these, the Bureau has approved three: *A Survey of Diarrheal Diseases in Pakistani Children*, *Socioethnological Factors in the Etiology of Toxemia of Pregnancy*, and *A Longitudinal Study of Growth and Development of Children from Various Social Strata and Ethnic Groups in Israel*.

Most of the fiscal year 1962 funds from Israel and Pakistan have been reserved for these projects, which will absorb about 25 percent of the year's total maternal and child health funds. Research proposals from Poland, Egypt, and India are under advisement.

During fiscal year 1962, one project in child welfare, *Institutionalization of Children*, and one in juvenile delinquency, *Forces Acting in "Street Corner Groups"* were approved for Israel. Six proposals dealing with juvenile delinquency or related fields and two in child welfare have been received. A total of 9 projects in maternal and child health and 17 in social welfare were received during fiscal year 1962.

The lack of trained personnel, research experience, and facilities in some of the countries limits the amount and type of cooperative research that can be developed. Also, the lack of dollar currency for administrative purposes, for providing materials and equipment for research which are not available with local currencies in the countries, for training of personnel in research outside of their country—in the United States or in other countries—also limits the research which is feasible under the program.

The Congress did not appropriate funds to the Social Security Administration for fiscal year 1963, thereby limiting the development of the program for the next fiscal year to the six countries and the funds available under the 1962 program.

International Training

*Long-term trainees.*¹—The number of programs developed and implemented for foreign professional students for whose training in the United States the Bureau carries program responsibility increased markedly in fiscal 1962. Programs were developed for 75 specialists from 32 countries. Thirty-eight of these were physicians, 12 were nurses, and 4 students were in other health fields: a physical therapist, an occupational therapist, an X-ray technician, and a staff mem-

¹ Foreign visitors for whom the Bureau plans and carries out programs of 2 weeks or more are classified as long-term.

ber of a ministry of health and welfare whose major interest was the administrative and management aspects of programs for handicapped children. Of the 21 other students, 8 were studying child welfare, 1 was a medical social worker, and 12 were studying juvenile delinquency. Thirty-seven were new arrivals during the year.

Consistent with the pattern of recent years, the largest group of students was sponsored by the Agency for International Development. Of the 58 AID participants, 34 were physicians.

For a number of reasons, such as the duration of the educational grant, insufficient academic preparation in the home country, or the purpose of the training, many students attend our universities or medical schools as nondegree candidates. A few, however, successfully complete the degree requirements. For example, two physicians received master's degrees in public health; a nurse from India received her master's degree from Wayne State University; another nurse from India, her bachelor's from Columbia; a social work student from Ethiopia received a master of social work from the University of Denver; a Vietnamese physician successfully passed the written examination of the American Board of Pediatrics in January and will take her orals before she leaves the United States.

The majority of participants sponsored by the Agency for International Development are sent to the United States for a year. In some instances, however, particularly with respect to medical education in a specialty, grants are extended for 2 or 3 years. Of the 75 students in long-term training status during fiscal year 1962, 26 had programs which lasted 12 months, and 17 were following programs extending beyond a single year. For 15 of the long-term students, the Bureau carried program responsibility for less than 6 months. At the end of the year, 25 students were continuing their programs into the new year.

Short-term visitors.—The number of foreign visitors who came to the Bureau for programs which ranged from conferences of an hour or two to programs which lasted a week or 10 days decreased. One hundred and thirty-six visitors from 47 countries visited during the fiscal year. The comparable figure for 1961 was 170 visitors from 70 countries. Slightly more than half of the visitors were referred by international or Federal agencies. Nearly half of the visitors came on their own.

Of the 136 visitors, 15 had a major interest in child welfare and 32 were primarily interested in juvenile delinquency. Maternal and child health and services for handicapped children were of major interest to 19.

A 5-year picture.—A look at the record of the training program for the past 5 years shows no discernible trend in the numbers of either

long-term students or visitors. One factor is constant—the high proportion of trainees in the health professions. Each year, more than 65 percent of the long-term students were physicians, nurses, or other health personnel. In 1962, the percentage was 72.

Assistance to Other Training Agencies

Other agencies, both Federal and voluntary, engaged in program planning for international visitors, turn to the Bureau for guidance in selecting appropriate resources to which to send visitors. Whenever possible, this is done only following a conference with the visitor, but in instances where a conference is not practical, the Bureau suggests resources throughout the country which fit the training objectives of the program. All plans and arrangements are made by the responsible agency. Typical of agencies requesting such advice are the American Council on Education, the Governmental Affairs Institute, and the Office of Education.

Summary

In fiscal 1962, the Children's Bureau has had a new sense of direction and purpose based on the perspectives of the past and the promise of the future. This year, as the Bureau prepared for and celebrated its own 50th anniversary, the accent was on moving ahead. Far-reaching amendments to Title V of the Social Security Act will make it possible for the Bureau to expand its services to children substantially and to increase the pool of trained workers for children's services in the years ahead.

Growing concern with children's services in States and communities—as on the upswing. Greater Federal support was in the offing.

Countrywide coverage by the Bureau's three grant-in-aid programs was still far from complete, either in variety of services or geographically. But steady advances were being made in these programs and in the Bureau's reporting and investigating activities. The demand for consultation on children's programs by public and voluntary agencies far outstripped the Bureau's capacity to meet them.

Fiscal 1962 was a year of ferment and steady progress for the Children's Bureau and its programs.

Bureau of Federal Credit Unions

The Bureau of Federal Credit Unions supervises more than 10,500 Federal credit unions under provisions of the Federal Credit Union Act of 1934, as amended. These privately operated cooperative associations are presently serving some 6½ million families located in

every State, in the District of Columbia, the Canal Zone, Guam, Puerto Rico, and the Virgin Islands.

Stated broadly, the Bureau's mission is to:

1. Promote self-help security through privately-owned and democratically-controlled Federal credit unions.

2. Stimulate systematic savings to provide capital and cash reserves for credit union members.

3. Make available to people of small means credit for provident purposes at reasonable rates of interest through a national system of co-operative thrift and credit.

4. Help stabilize the economy of the United States by developing sound thrift, credit, and personal financial management practices.

To achieve these objectives, the Bureau encourages and actively participates in the organization of Federal credit unions; periodically examines all Federal credit unions for financial soundness and to ensure compliance with the laws and bylaws; and exercises general supervision over these groups. Manuals and other informational material and instructions are prepared for the guidance of the credit union officials.

Since 1953, the Bureau has not received appropriations from general funds but has operated entirely on the charter, supervision, and examination fees collected from Federal credit unions.

Federal credit unions do not serve the general public, but are limited to dealing with their members. Membership is based on a common bond of occupation or association, or to residence in a well-defined community. Membership in Federal credit unions increased 7½ percent in 1961 to 6,543,000, representing a net increase of 455,000 for the year. Membership participation edged up to 55 percent of the potential membership, from 54 percent a year earlier. The vast majority—83 percent at the end of 1961—serve workers in the huge complex of American industry, from the pineapple plantations in Hawaii to the steel mills in Pittsburgh. Fifteen percent of the Federal credit unions are organized among associational groups—cooperatives, fraternal and professional groups, churches, and labor unions—and 2 percent serve the members of closely knit urban or rural areas.

Two important milestones in credit union operations were passed mid-way in the fiscal year when the number of operating groups passed the 10,000 mark, and total assets of these groups exceeded \$3 billion for the first time. Later in the fiscal year—in May 1962—a third important event took place when credit union services were extended to Guam, bringing the number of jurisdictions served by Federal credit unions to 55.

Consumer Protection

Increased emphasis has been given to the role of credit unions in protecting consumers against credit grantors who fail to disclose the true cost of credit. Federal credit unions are making progress on this front through the use of better financial counseling and educational programs. Credit union representatives and departmental officials have testified in favor of legislation to require extenders of credit to disclose its true cost on a uniform basis to enable consumers to make more informed decisions about where and how to obtain credit. (S. 1740, 87th Congress, second session, "Truth in Lending Bill.")

The need for more and better preventive counseling and consumer education by credit unions requires leadership and encouragement by the Bureau and cooperation with social service agencies. A beginning has been made in some of the larger cities but much more needs to be done to make social service agencies generally aware of the services of credit unions and credit unions aware of social services in their respective communities.

Student Loans for Higher Education

The Bureau recognized the desire and need of Federal credit unions to make a greater contribution toward helping students gain a higher education. An amendment to the Rules and Regulations for Federal Credit Unions liberalized repayment terms of loans to students for higher education. This action will enable Federal credit unions to participate more widely in State-guaranteed loan plans. It will also broaden their opportunities for service to members in the effort to make it possible for students to gain a higher education.

Manpower Utilization

Emphasis continued to be placed on the Bureau's examination program. Improved operations were accomplished through a continuing training program for Bureau examiners, and measurable results were achieved. Productivity of the examiners has steadily increased. Measured in terms of man-days required to perform the examination program in fiscal year 1962, the aggregate saving in time compared to fiscal years 1959, 1960, and 1961 was 4,748 man-days. Throughout this period, there has been no increase in fees charged the credit unions for examinations, and on the basis of the saving in man-days required to complete the program, Federal credit unions saved about \$227,900 while an additional \$71,600 accrued to the Bureau in terms of higher average fees per examination day.

Strengthening Research and Statistics

Another important area in which noteworthy improvement took place during the past fiscal year was in the Bureau's statistical program. A completely new classification system for Federal credit unions, by type-of-membership, was set up, involving reclassification of more than 10,000 active groups. The new system was patterned after the Standard Industrial Classification, and will permit greater utilization of the data on Federal credit unions. This is an important step toward filling the need for more adequate research in depth.

Expansion and improvement of the Bureau's research program is a major area of emphasis. It will be essential to have more complete knowledge about many aspects of credit unions and their members to provide sound bases for decisions on proposed legislation and policies which will more effectively carry out the Bureau's mission.

International Activities

The Bureau's role in international activities took on added stature during fiscal year 1962, when the Assistant to the Director participated in the First International Conference of Cooperatives at Bogota, Colombia, and the Bureau provided technical assistance to the Inter-American Development Bank in connection with a loan to the Central Credit Union of Peru, which, in turn, will make loans to Peruvians of low income for building homes, for improving the use of the land and for potable water and sanitation projects. Bureau staff also participated in training several foreign visitors and learned from these contacts of the vast need for credit union literature in the language of the countries concerned. To fill this void, at least partially, during fiscal year 1962, the Bureau published the Federal Credit Union Act, the Standard Bylaws, and a general informational leaflet about credit unions, in Spanish.

The Bureau is continuing its efforts to enlist the cooperation of AID and USIA in meeting the urgent, unmet need for translation, publication, and distribution of technical operating and accounting manuals in the languages of developing countries.

The Assistant to the Director represented the Department of Health, Education, and Welfare on a work group which evaluated International Cooperation Administration assistance to cooperatives in other countries. Recommendations were made to the Advisory Committee on Cooperatives for implementing and accelerating technical and financial assistance for establishing cooperatives in developing countries. Some of these recommendations are now being implemented by AID. Whenever requested, the Bureau cooperates with

AID in planning and providing training for participants seeking to widen their knowledge and skills in connection with credit unions. The much-publicized program of assistance to cooperatives as yet has hardly gotten off the ground with respect to credit unions. These basic cooperatives are most effective in enabling people of low income to mobilize and control their meager savings while learning the fundamentals of democratic procedures. This potential for effective aid which strengthens the dignity of people with very modest expenditures of money should be developed more rapidly. In keeping with the objectives of encouraging self-help in the foreign aid programs overseas, credit union development should be speeded up.

Extending Coverage to Low-Income Groups

Extension of coverage to all who need and want credit union services is the ultimate goal, which can best be achieved through a program of consumer education in conjunction with a realistic chartering policy. Credit unions are voluntary associations of people, and the organization of a credit union originates with the group, not with the Bureau. The fact that new groups generally do not pay the full cost of supervision and examination during the first year or two need not act as a deterrent in chartering. This is especially true for low-income groups, who have the most need for credit union and other services and yet may experience a slower and more difficult growth. The enormous social values evolving from coverage of these groups should receive full weight, in relation to the financial considerations. The practice has been accepted that established credit unions help the smaller groups. It is generally known that many low income groups still do not have credit union service available. Overcoming the administrative and other difficulties inherent in extension of coverage to large segments of the low income population would be a major achievement in Bureau operations.

There were no amendments to the Federal Credit Union Act during the fiscal year.

Table 1.—Social Security Administration: Funds available and obligations incurred, fiscal years 1962 and 1961¹

[In thousands, data as of June 30, 1962]

	Funds available ²		Obligations incurred	
	1962	1961	1962	1961
Total.....	\$2,751,996	\$2,471,014	\$2,811,631	\$2,470,676
Grants to States.....	2,470,300	2,228,833	2,535,323	2,231,990
Public assistance ³	2,401,200	2,177,000	2,466,974	2,180,466
Old-age assistance.....			1,256,388	1,211,709
Aid to the blind.....			47,483	48,517
Aid to families with dependent children.....			853,685	704,108
Aid to the permanently and totally disabled.....			199,552	182,625
Medical assistance for the aged.....			109,866	33,507
Maternal and child health and welfare services.....	69,100	51,833	68,349	51,524
Maternal and child health services.....	25,000	18,167	24,844	18,114
Services for crippled children.....	25,000	20,000	24,638	19,797
Child welfare services.....	18,750	13,666	18,648	13,613
Research or demonstration projects in child welfare.....	350		219	
Assistance for repatriated United States nationals.....	764		517	
Cooperative research and demonstration projects.....	700	350	695	347
Research and training (special foreign currency program).....	1,607		353	
Administrative expenses ⁴	278,625	241,831	274,743	238,339
Office of the Commissioner ⁵	912	669	787	659
Bureau of Old-Age and Survivors Insurance ⁶	267,570	232,200	264,289	228,909
Bureau of Hearings and Appeals ⁶				
Bureau of Family Services.....	3,442	2,727	3,210	2,677
Children's Bureau ⁷	2,668	2,494	2,630	2,486
White House Conference on Children and Youth.....		150		146
Bureau of Federal Credit Unions.....	4,033	3,591	3,827	3,462

¹ Funds available and obligations reported by administrative agencies.² Funds made available by regular and supplemental appropriations, authorizations, transfers, allotments, recoveries, and fee collections for services rendered.³ Obligations for 1961 include \$3,465,750 used from 1962 appropriation to complete 1961 requirements; obligations for 1962 exclude the aforementioned \$3,465,750 and include \$69,240,142 used from 1963 appropriation to complete 1962 requirements.⁴ Funds made available and obligations incurred for salaries, printing and binding, communications, traveling expenses, and all other objects of expenditure.⁵ Appropriations by Congress from general revenues accounted for approximately 50 percent of the administrative expenses of the Office of the Commissioner in 1961 and 1962; balance from old-age and survivors insurance trust fund.⁶ Administrative costs of the old-age, survivors, and disability insurance program, which involved benefit payments of \$11,884,000,000 in 1961 and \$13,579,000,000 in 1962; does not include construction costs of new buildings as follows: *Funds available*: 1961, \$5,179,585; 1962, \$966,893. *Obligations incurred*: 1961, \$4,212,692; 1962, \$568,334. Also includes expenses for the Bureau of Hearings and Appeals as follows: *Funds available*: 1961, \$4,436,602; 1962, \$6,457,114. *Obligations incurred*: 1961, \$4,248,625; 1962, \$5,733,309.⁷ Includes expenses for investigating and reporting on matters pertaining to the welfare of children authorized by the Act of 1912, as well as expenses for administration of grants to States.

Table 2.—Financing social insurance under the Social Security Act: Contributions collected and trust fund operations, fiscal years 1960–62

[In millions, independently rounded]

Item	1962	1961	1960
Contributions collected under—			
Federal Insurance Contributions Act ^{1 2}	\$12,475	\$12,315	\$10,830
Federal Unemployment Tax Act ³	458	345	341
State unemployment insurance laws ^{4 5}	2,709	2,361	2,165
Old-age and survivors insurance trust fund:			
Receipts, total	11,985	11,814	10,342
Net appropriations and deposits	11,454	11,293	9,843
Net interest and profits on investments	530	522	500
Expenditures, total	13,259	11,743	11,055
Monthly benefits and lump-sum payments	12,657	11,185	10,270
Transfer under financial interchange with railroad retirement account ⁶	350	322	583
Administration	251	236	202
Assets, end of year	19,626	20,900	20,829
Disability insurance trust fund:			
Receipts, total	1,088	1,082	1,061
Net appropriations and deposits	1,021	1,022	987
Transfers from railroad retirement account ⁶			26
Net interest and profit	67	60	48
Expenditures, total	1,086	745	560
Monthly benefits	1,011	704	528
Transfers to railroad retirement account ⁶	11	5	
Administration	63	36	32
Assets, end of year	2,507	2,504	2,167
State accounts in unemployment trust fund:			
Receipts, total	2,932	2,614	2,351
Deposits ⁷	2,767	2,417	2,169
Interest	165	196	182
Withdrawals for benefit payments	2,857	3,558	2,366
Assets, end of year	5,805	3,729	6,673

¹ Contributions on earnings up to and including \$4,800 a year beginning Jan. 1, 1959. Contribution rate paid by employers and employees: 2½ percent each beginning Jan. 1, 1959; 3 percent each beginning Jan. 1, 1960. Contribution rate paid by self-employed: 3¾ percent beginning Jan. 1, 1959; 4¼ percent beginning Jan. 1, 1960. Includes deposits by States under voluntary agreements for coverage of State and local employees. Includes deductions to adjust for reimbursements to general funds of the Treasury of the estimated amount of employee taxes subject to refund on wages in excess of wage base.

² Includes old-age and survivors insurance and, beginning Jan. 1, 1957, disability insurance contributions.

³ Prior to 1957 tax could be paid in quarterly installments by employers of 8 or more; beginning Jan. 31, 1957, tax payable annually on preceding year's wages by employers of 4 or more. Rate is 3 percent (beginning Jan. 1, 1961, 3.1 percent) on first \$3,000 a year of wages paid to each employee by subject employer. Because of credit offset, permitted for contributions paid under State unemployment insurance laws (or for full contribution if reduced by State experience rating provisions), effective rate of 0.3 percent (beginning Jan. 1, 1961, 0.4 percent) of such wages.

⁴ Contributions plus penalties and interest collected from employers and contributions from employees, reported by State agencies.

⁵ Contributions and deposits by States usually differ slightly, because of time lag in making deposits. Deposits in the State accounts also include loans from the Federal unemployment account of the unemployment trust fund.

⁶ Under the financial interchange with the railroad retirement account the two social security trust funds are to be placed in the financial position in which they would have been had railroad employment always been covered under the Social Security Act.

Source: Compiled from *Final Statement of Receipts and Expenditures of the United States Government*, other Treasury reports, and State agency reports.

Table 3.—Old-age, survivors, and disability insurance: Number of families and beneficiaries receiving benefits and average monthly benefit in current-payment status, by family group, end of December 1961 and December 1960

[In thousands, except for average benefit]

Family classification of beneficiaries	Dec. 31, 1961			Dec. 31, 1960		
	Number of families	Number of beneficiaries	Average monthly amount per family	Number of families	Number of beneficiaries	Average monthly amount per family
Total.....	12,173.6	16,494.8	-----	10,959.6	14,844.6	-----
Retired-worker families.....	8,924.8	11,655.2	-----	8,061.5	10,599.0	-----
Worker only.....	6,470.2	6,470.2	\$71.90	5,741.8	5,741.8	\$69.90
Male.....	3,335.9	3,335.9	81.20	2,921.7	2,921.7	79.90
Female.....	3,134.3	3,134.3	62.00	2,820.2	2,820.2	59.60
Worker and aged wife ¹	2,213.6	4,427.1	126.60	2,122.0	4,243.9	123.90
Worker and young wife ²	.9	1.9	108.50	1.0	2.0	111.00
Worker and aged dependent husband.....	13.6	27.2	107.50	14.3	28.6	105.50
Worker and 1 or more children.....	62.6	141.2	120.90	50.2	113.4	119.40
Worker, aged wife, ¹ and 1 or more children.....	25.2	77.4	159.20	22.0	67.4	157.60
Worker, young wife, ² and 1 or more children.....	138.6	509.7	149.20	109.9	401.2	152.30
Worker, husband, and 1 or more children.....	.1	.4	123.30	.2	.6	115.70
Survivor families.....	2,630.7	3,812.5	-----	2,442.8	3,568.1	-----
Aged widow.....	1,677.4	1,677.4	64.90	1,527.3	1,527.3	57.70
Aged widow and 1 or more children.....	17.3	35.4	122.90	14.2	29.2	112.90
Aged widow and 1 or 2 aged dependent parents.....	.3	.5	153.80	.3	.6	131.00
Aged dependent widower.....	2.3	2.3	62.10	2.0	2.0	54.10
Widower and 1 or more children.....	.1	.1	91.30	(1)	.1	84.40
Widowed mother only ³	1.1	1.1	61.50	1.4	1.4	64.20
Widowed mother ³ and 1 aged dependent parent.....	0	0	0	(1)	(1)	173.70
Widowed mother and 1 child.....	184.6	369.2	135.00	171.9	343.9	131.70
Widowed mother and 2 children.....	120.3	361.0	189.30	113.4	340.1	188.00
Widowed mother and 3 or more children.....	121.3	587.5	182.80	113.8	547.6	181.70
Widowed mother, 1 or more children, and 1 or 2 aged dependent parents.....	.4	1.4	231.00	.5	1.8	214.70
Widowed mother, divorced wife, and children.....	(4)	.1	247.90	0	0	0
Divorced wife and 1 or more children.....	.4	1.0	170.10	.4	1.0	163.40
1 child only.....	302.2	302.2	60.70	296.4	296.4	58.50
2 children.....	104.6	209.2	124.60	106.6	213.2	122.50
3 children.....	40.8	122.5	160.10	38.3	115.0	155.00
4 or more children.....	23.1	104.8	168.30	22.6	102.5	157.20
1 or more children and 1 or 2 aged dependent parents.....	.5	1.1	145.30	.7	1.5	137.60
1 aged dependent parent.....	32.5	32.5	68.10	31.6	31.6	60.90
2 aged dependent parents.....	1.5	3.1	111.00	1.5	3.0	107.90
Disabled-worker families.....	618.1	1,027.1	-----	455.4	687.5	-----
Worker only.....	459.3	459.3	87.70	356.8	356.8	87.90
Male.....	332.0	332.0	91.50	261.3	261.3	91.90
Female.....	127.3	127.3	77.70	95.5	95.5	76.90
Worker and aged wife ¹	24.5	48.9	136.50	21.7	43.5	135.60
Worker and young wife ²	.1	.1	156.90	.2	.4	143.20
Worker and aged dependent husband.....	.3	.6	115.80	.2	.4	120.70
Worker and 1 or more children.....	40.6	106.4	154.90	22.0	55.8	154.40
Worker, aged wife, ¹ and 1 or more children.....	.2	.6	186.60	.1	.3	186.20
Worker, young wife, ² and 1 or more children.....	93.2	411.2	191.10	54.4	230.3	189.10

¹ Wife aged 65 or over or wife aged 62-64 with no entitled children in her care.

² Wife under age 65 with 1 or more entitled children in her care.

³ Benefits to children were being withheld.

⁴ Less than 50.

Table 4.—Old-age, survivors, and disability insurance: Number and amount of monthly benefits in current-payment status at end of June 1962 and amount of benefit payments in fiscal year 1962, by State

[In thousands]

Beneficiary's State of residence	Monthly benefits in current-payment status, June 30, 1962					Benefit payments in fiscal year 1962 *			
	Total		OASI ¹		DI ¹	Total	OASI ¹		DI ¹
	Number	Monthly amount	Number	Monthly amount			Monthly benefits	Lump-sum death payments	
Total.....	17,280.4	\$1,128,166	16,128.5	\$1,053,102	1,151.8	\$75,064	\$12,483,747	\$174,089	\$1,011,376
Alabama.....	290.9	15,369	259.8	13,624	31.1	1,745	160,250	2,517	23,428
Alaska.....	7.1	429	6.7	403	.4	26	4,834	84	333
American Samoa.....	1	2	1	2	0	0	19	0	0
Arizona.....	107.0	7,004	96.9	6,309	10.1	685	73,978	1,040	9,163
Arkansas.....	137.3	10,175	131.8	9,319	15.5	856	121,888	1,400	11,301
California.....	1,348.6	92,884	1,266.9	87,005	78.6	5,878	1,029,821	14,273	78,612
Colorado.....	144.8	9,294	136.4	8,738	8.4	557	112,254	1,413	7,301
Connecticut.....	250.6	18,741	238.3	17,816	12.3	925	228,281	2,839	12,740
Delaware.....	38.2	2,606	35.7	2,432	2.5	174	31,577	450	2,344
District of Columbia.....	57.2	3,598	53.1	3,321	4.2	276	44,240	788	3,661
Florida.....	565.8	39,771	555.1	37,080	40.8	2,691	474,241	4,624	35,815
Georgia.....	313.7	16,655	277.3	14,670	36.4	1,985	200,870	2,854	26,090
Guam.....	2	5	2	5	(³)	(³)	69	0	1
Hawaii.....	36.2	2,210	33.7	2,043	2.6	167	26,644	348	2,288
Idaho.....	61.6	3,915	58.4	3,708	3.2	207	47,063	650	2,785
Illinois.....	957.2	67,810	903.4	63,868	53.8	3,941	823,548	11,158	52,876
Indiana.....	473.9	31,944	446.0	30,049	27.9	1,895	387,080	4,716	25,795
Iowa.....	301.0	19,428	288.9	18,637	12.1	791	235,178	2,676	10,818
Kansas.....	219.3	13,775	208.7	13,086	10.6	689	167,296	155,650	9,540
Kentucky.....	330.6	18,069	294.2	16,214	36.4	1,885	158,856	2,444	24,949
Louisiana.....	238.6	13,116	211.1	11,700	27.5	1,416	157,640	186,587	18,646
Maine.....	113.0	7,079	106.5	6,684	6.5	395	86,121	2,407	15,625
Maryland.....	227.3	14,963	213.0	13,980	14.3	983	181,444	165,154	13,626
Massachusetts.....	552.0	39,047	523.0	36,994	28.9	2,053	477,580	443,052	28,390
Michigan.....	727.3	52,434	681.9	49,171	45.4	3,264	634,561	7,558	44,262
Minnesota.....	336.2	21,751	323.3	20,886	13.0	865	293,415	2,840	11,878
Mississippi.....	201.5	9,416	183.1	8,482	18.5	934	112,714	99,092	12,179
Missouri.....	466.1	29,546	437.7	27,720	28.4	1,826	357,282	4,536	24,713
Montana.....	65.8	4,346	62.3	4,110	3.5	235	53,283	49,592	3,143
Nebraska.....	149.0	9,348	143.5	8,670	5.5	354	112,576	1,316	4,838
Nevada.....	19.6	1,348	18.5	1,261	1.1	87	16,180	14,710	1,191
New Hampshire.....	69.8	4,089	66.7	4,473	3.1	216	56,894	53,068	3,046

New Jersey.....	592.7	43,494	561.4	41,154	31.3	2,340	529,279	489,437	7,456	32,386
New Mexico.....	59.0	3,229	53.9	2,961	5.1	268	38,898	34,801	3,554	3,553
New York.....	1,709.8	122,974	1,613.8	115,942	96.0	7,032	1,493,763	1,378,302	20,081	95,380
North Carolina.....	391.1	20,781	352.6	18,617	38.5	2,114	249,637	218,172	3,380	28,085
North Dakota.....	58.5	3,549	56.2	3,424	2.3	126	43,243	41,108	1,681	1,684
Ohio.....	908.2	63,223	850.9	59,249	57.3	3,973	770,345	706,485	9,720	54,140
Oklahoma.....	222.6	13,215	206.2	12,195	16.4	1,020	185,247	143,055	1,951	13,241
Oregon.....	195.6	13,322	184.9	12,560	10.8	761	161,920	149,740	1,954	10,226
Pennsylvania.....	1,171.9	82,022	1,094.8	76,506	77.0	5,517	1,004,132	914,699	13,254	76,179
Puerto Rico.....	149.8	5,025	140.4	4,739	9.4	287	57,225	53,391	551	3,283
Rhode Island.....	95.7	6,671	90.0	6,265	5.8	406	81,283	74,849	966	5,408
South Carolina.....	188.4	9,747	166.2	8,549	22.2	1,199	118,061	100,519	1,725	15,817
South Dakota.....	68.5	4,160	65.8	4,002	2.7	158	50,702	47,932	591	2,179
Tennessee.....	333.0	17,630	301.1	15,870	31.9	1,760	211,814	186,169	2,757	22,888
Texas.....	740.6	42,757	685.8	39,472	54.8	3,286	512,498	461,725	7,005	43,768
Utah.....	63.6	4,191	60.6	3,989	3.0	203	50,851	47,418	696	2,737
Vermont.....	44.5	2,801	41.6	2,623	2.9	179	34,057	31,145	423	2,489
Virgin Islands.....	1.5	70	1.5	68	(2)	3	807	766	13	28
Virginia.....	323.8	18,437	291.5	16,584	32.3	1,854	223,682	196,063	2,966	24,603
Washington.....	277.3	19,093	262.9	18,054	14.4	1,039	233,266	216,344	2,699	14,253
West Virginia.....	223.7	13,311	191.2	11,479	32.5	1,832	163,176	136,534	1,727	14,915
Wisconsin.....	419.5	28,326	399.3	26,947	20.2	1,379	343,150	320,569	3,891	18,690
Wyoming.....	26.7	1,738	25.2	1,643	1.5	95	20,935	19,380	309	1,266
Abroad.....	118.5	7,676	113.5	7,454	2.9	222	90,694	86,893	784	3,017

¹ Benefits under the old-age and survivors insurance (OASD) parts of the old-age, survivors, and disability insurance program are payable from the OASI trust fund to old-age, retired-worker) beneficiaries and their dependents and to survivors of deceased workers. Benefits under the disability insurance (DI) part of the program are payable from the DI trust fund to disability (disabled-worker) beneficiaries and their dependents.

² Distribution by State estimated.

³ Less than \$0.

⁴ Less than \$500.

Table 5.—*Old-age, survivors, and disability insurance: Selected data on employers, workers, taxable earnings, and contributions, by State for specified periods*

[In thousands, except for average taxable earnings. Preliminary, corrected to October 26, 1962]

State	Employers reporting taxable wages July-September 1961 ¹	Calendar year 1959			
		Workers reported with taxable earnings ²	Reported taxable earnings ³		Contributions ⁴
			Amount	Average per worker	
Total.....	4,260	71,500	\$202,346,000	\$2,830	\$9,884,400
Alabama.....	64	1,090	2,419,000	2,220	118,300
Alaska.....	4	80	205,000	2,560	10,000
Arizona.....	28	490	1,220,000	2,490	59,700
Arkansas.....	40	580	1,114,000	1,920	53,400
California.....	383	6,270	18,256,000	2,910	891,500
Colorado.....	42	680	1,665,000	2,450	80,300
Connecticut.....	66	1,150	3,406,000	2,960	167,300
Delaware.....	13	210	567,000	2,700	27,900
District of Columbia.....	30	480	1,141,000	2,380	56,400
Florida.....	133	1,940	4,268,000	2,200	207,900
Georgia.....	94	1,450	3,098,000	2,140	151,500
Hawaii.....	13	230	600,000	2,610	29,400
Idaho.....	15	280	634,000	2,260	30,200
Illinois.....	227	4,500	13,332,000	2,960	652,300
Indiana.....	100	1,930	5,585,000	2,890	273,100
Iowa.....	66	1,090	2,751,000	2,520	129,700
Kansas.....	54	880	2,110,000	2,400	100,600
Kentucky.....	61	980	2,183,000	2,230	105,300
Louisiana.....	67	1,050	2,449,000	2,330	119,700
Maine.....	25	390	858,000	2,200	41,800
Maryland.....	77	1,190	2,931,000	2,460	143,400
Massachusetts.....	122	2,240	6,234,000	2,780	306,600
Michigan.....	159	3,150	9,941,000	3,160	488,200
Minnesota.....	74	1,310	3,453,000	2,640	166,400
Mississippi.....	38	640	1,228,000	1,920	59,500
Missouri.....	108	1,840	4,753,000	2,580	231,000
Montana.....	16	280	706,000	2,520	33,800
Nebraska.....	39	600	1,392,000	2,320	65,400
Nevada.....	8	150	356,000	2,370	17,400
New Hampshire.....	17	280	740,000	2,640	30,300
New Jersey.....	158	2,700	7,885,000	2,920	386,900
New Mexico.....	20	340	723,000	2,130	35,100
New York.....	481	8,100	24,470,000	3,020	1,202,200
North Carolina.....	104	1,740	3,809,000	2,190	185,700
North Dakota.....	14	230	509,000	2,210	23,300
Ohio.....	203	3,850	11,550,000	3,000	566,200
Oklahoma.....	49	900	2,071,000	2,300	100,000
Oregon.....	43	790	2,033,000	2,570	98,600
Pennsylvania.....	257	4,680	13,662,000	2,920	669,900
Puerto Rico.....	19	470	543,000	1,160	26,500
Rhode Island.....	21	360	944,000	2,620	46,300
South Carolina.....	51	830	1,769,000	2,130	80,600
South Dakota.....	18	250	547,000	2,190	25,300
Tennessee.....	79	1,270	2,865,000	2,260	139,500
Texas.....	236	3,740	8,614,000	2,300	418,200
Utah.....	17	360	870,000	2,420	42,400
Vermont.....	11	150	331,000	2,210	16,000
Virgin Islands.....	1	10	15,000	1,500	800
Virginia.....	91	1,400	3,282,000	2,340	160,600
Washington.....	65	1,150	3,230,000	2,810	157,400
West Virginia.....	37	650	1,060,000	2,550	81,500
Wisconsin.....	94	1,620	4,546,000	2,810	220,700
Wyoming.....	9	150	340,000	2,270	16,300
Foreign ⁵	1	90	274,000	3,040	13,500
Oceanborne vessels.....		110	330,000	3,000	16,500
Uniformed services (on basic pay).....		3,300	5,883,000	1,780	294,200

¹ Data represent number of employers reporting taxable wages by the State of their reporting headquarters. An employer is a legal entity such as a corporation, partnership, or a single ownership for which a single tax return is filed. Excludes agricultural employers.

² Workers employed in more than one State are counted in each State. National and state totals represent unduplicated counts of workers.

³ Annual taxable limit with respect to wages from a single employer, or on self-employment income was \$4,800 in 1959. Averages rounded to nearest \$10.

⁴ Contribution rate was 2½ percent, each, for employees and employers; and 3¾ percent for self-employed persons in 1959.

⁵ Represents employment and earnings of U.S. citizens outside the listed States and groups by American employers and their foreign subsidiaries.

Table 6.—Old-age, survivors, and disability insurance: Selected data on benefits, employers, workers, and taxable earnings for specified periods, 1960-62

[In thousands, except for average monthly benefit and average taxable earnings; corrected to October 18, 1962]

Item	1962	1961	1960
	Fiscal year		
Benefits in current-payment status (end of period):			
Number (OASI and DI) ¹	17,280.4	15,624.2	14,261.8
Number (OASI)	16,128.5	14,726.5	13,740.3
Number (DI)	1,151.8	897.7	521.6
Old-age (retired-worker)	9,347.6	8,414.0	7,813.0
Disability (disabled-worker)	679.3	558.1	370.8
Wife's or husband's (OASI and DI)	2,596.6	2,432.5	2,279.9
Wife's or husband's (OASI)	2,463.9	2,329.9	2,223.5
Wife's or husband's (DI)	132.7	102.6	56.4
Child's (OASI and DI) ²	2,407.5	2,141.3	1,903.5
Child's (OASI) ²	2,067.6	1,904.3	1,809.1
Child's (DI) ²	339.9	237.0	94.4
Widow's or widower's	1,778.1	1,621.9	1,471.3
Mother's	434.6	419.9	387.9
Parent's	36.7	36.4	35.5
Total monthly amount (OASI and DI)	\$1,128,166	\$992,032	\$889,863
Total monthly amount (OASI)	\$1,053,102	\$931,705	\$851,791
Total monthly amount (DI)	\$75,064	\$60,327	\$38,071
Old-age (retired-worker)	\$710,736	\$627,400	\$575,295
Disability (disabled-worker)	\$60,948	\$49,895	\$33,123
Wife's or husband's (OASI and DI)	\$101,821	\$94,195	\$87,701
Wife's or husband's (OASI)	\$97,489	\$90,759	\$85,676
Wife's or husband's (DI)	\$4,333	\$3,437	\$2,025
Child's (OASI and DI) ²	\$110,061	\$99,233	\$84,789
Child's (OASI) ²	\$100,277	\$92,238	\$81,865
Child's (DI) ²	\$9,784	\$6,995	\$2,924
Widow's or widower's	\$116,317	\$94,270	\$84,229
Mother's	\$25,797	\$24,823	\$22,609
Parent's	\$2,487	\$2,215	\$2,117
Average monthly amount:			
Old-age (retired-worker)	\$76.03	\$74.57	\$73.63
Disability (disabled-worker)	\$89.73	\$89.41	\$89.33
Wife's or husband's (OASI and DI)	\$39.21	\$38.72	\$38.47
Wife's or husband's (OASI)	\$39.57	\$38.95	\$38.53
Wife's or husband's (DI)	\$32.65	\$33.50	\$35.92
Child's (OASI and DI) ²	\$45.71	\$46.34	\$44.54
Child's (OASI) ²	\$48.50	\$48.44	\$45.25
Child's (DI) ²	\$28.78	\$29.51	\$30.98
Widow's or widower's	\$65.42	\$58.12	\$57.25
Mother's	\$59.36	\$59.11	\$58.29
Parent's	\$67.68	\$60.85	\$59.67
Benefit payments during period:			
Monthly benefits (OASI and DI)	\$13,495,123	\$11,721,534	\$10,632,223
Monthly benefits (OASI)	\$12,483,747	\$11,017,539	\$10,103,937
Monthly benefits (DI)	\$1,011,376	\$703,995	\$528,304
Old-age (retired-worker)	\$8,339,881	\$7,371,205	\$6,803,478
Disability (disabled-worker)	\$816,349	\$589,497	\$450,114
Supplementary (OASI and DI)	\$1,485,396	\$1,300,137	\$1,183,515
Supplementary (OASI)	\$1,290,369	\$1,185,639	\$1,105,327
Supplementary (DI)	\$195,027	\$114,498	\$78,190
Survivor	\$2,853,497	\$2,460,695	\$2,195,132
Lump-sum death payments	\$174,089	\$166,993	\$165,772
Workers insured for OASI benefits (midpoint of period—Jan. 1): ³			
Fully insured	89,300	85,300	79,600
Currently but not fully insured	88,700	84,400	76,600
Workers insured for disability (midpoint of period—Jan. 1): ³	600	1,000	2,900
Estimated number of employers reporting taxable wages, 1st quarter of fiscal year ⁴	50,900	48,800	46,300
	4,250	4,230	4,170
	Calendar year		
Estimated number of workers with taxable earnings	75,000	74,000	73,000
Estimated amount of taxable earnings	\$220,000,000	\$210,000,000	\$207,600,000
Average taxable earnings ⁵	\$2,930	\$2,840	\$2,840

¹ Benefits under the old-age and survivors insurance (OASI) parts of the old-age, survivors, and disability insurance program are payable from the OASI trust fund to old-age insurance (retired-worker) beneficiaries and their dependents and to survivors of deceased workers. Benefits under the disability insurance (DI) part of the program are payable from the DI trust fund to disability insurance (disabled-worker) beneficiaries and their dependents.

² Includes benefits payable to disabled persons aged 18 or over—dependent sons and daughters of disabled, deceased, or retired workers—whose disability began before age 18.

³ Estimates of insured workers have not been adjusted to reflect changes in insurance status arising from: (1) provisions that coordinate the old-age, survivors, and disability insurance and railroad retirement programs and (2) wage credits for military service. Estimates are only partially adjusted to eliminate duplicate count of persons with taxable earnings reported on more than 1 account number.

⁴ Excludes agricultural employers.

⁵ Rounded to nearest \$10.

Table 7.—Special types of public assistance under plans approved by the June 1962, and total payments to recipients,

[Including vendor payments for medical care and cases

State	Old-age assistance			Medical assistance for the aged			Aid to dependent children		
	Number of recipients, June	Payments to recipients		Number of recipients, June	Payments to recipients		Number of recipients, June		
		Average payment, June	Total, fiscal year (in thousands)		Average payment, June	Total, fiscal year (in thousands)	Families	Total ¹	Children
Fiscal year:									
1960	2,358,539	\$68.01	\$1,894,639				794,396	3,023,311	2,330,108
1961	2,295,925	67.90	1,914,946	46,247	\$201.33	\$42,899	877,961	3,382,095	2,612,611
1962	2,236,870	72.55	1,899,039	101,634	171.36	196,127	944,043	3,692,566	2,853,387
Alabama	101,234	62.93	72,076	162	183.90	121	21,794	88,320	69,331
Alaska	1,362	70.45	1,157				1,252	4,301	3,236
Arizona	13,690	59.34	9,961				9,214	38,003	29,869
Arkansas	55,513	56.54	35,302	1,343	47.40	355	6,396	24,662	19,011
California	257,999	103.42	292,760	16,429	290.45	18,002	90,461	337,022	260,052
Colorado	49,518	99.11	58,317				8,761	33,886	26,697
Connecticut	9,851	80.77	18,945	3,961	192.42	1,152	11,146	42,043	32,141
Delaware	1,129	49.44	692				2,023	8,486	6,634
District of Columbia	2,911	83.99	2,937				4,976	22,724	18,133
Florida	70,422	60.19	50,376				26,321	97,956	78,339
Georgia	93,156	49.17	53,325				16,758	62,818	48,761
Guam	131	38.39	37	17	(?)	(?)	185	1,003	841
Hawaii	1,193	70.44	998	412	260.06	811	3,018	12,351	9,876
Idaho	5,742	71.42	5,259	1,168	143.72	1,804	2,476	9,337	6,908
Illinois	66,285	82.90	66,115	392	246.76	634	61,492	264,520	206,411
Indiana	24,967	68.58	20,439				12,331	46,887	35,650
Iowa	31,568	73.00	32,904				10,052	37,718	28,661
Kansas	25,880	86.51	26,894				6,662	25,788	20,462
Kentucky	54,757	53.86	35,190	2,164	18.40	311	22,155	79,655	59,871
Louisiana	126,995	81.24	114,355	270	394.15	359	22,327	92,231	71,973
Maine	11,111	69.85	9,181	397	265.72	402	6,028	21,540	16,001
Maryland	9,435	69.48	7,531	5,051	54.79	1,832	11,957	50,527	39,893
Massachusetts	59,410	81.72	62,175	20,391	179.03	41,673	19,041	66,180	49,701
Michigan	53,100	80.30	51,398	4,896	318.81	17,149	33,342	120,017	88,446
Minnesota	44,241	101.22	51,780				11,371	39,940	31,344
Mississippi	78,949	36.03	33,674				20,522	80,459	63,159
Missouri	109,252	61.35	81,287				26,913	104,970	80,206
Montana	6,183	65.37	4,937				1,882	7,212	5,600
Nebraska	13,534	77.92	12,794				3,285	12,880	9,943
Nevada	2,483	83.89	2,394				1,284	4,683	3,740
New Hampshire	4,628	90.66	5,067	33	(?)	13	1,045	4,155	3,189
New Jersey	18,527	95.03	18,567				20,996	76,326	58,193
New Mexico	10,843	59.66	8,913				7,427	29,221	22,579
New York	58,039	79.39	57,932	26,965	135.48	99,071	87,037	360,547	277,649
North Carolina	45,908	50.94	27,402				28,253	111,727	86,545
North Dakota	6,181	82.50	6,651	836	210.45	1,450	1,845	6,922	5,416
Ohio	87,828	80.93	83,677				35,238	140,300	107,517
Oklahoma	85,399	84.47	86,478	571	239.60	886	19,325	70,652	53,946
Oregon	15,815	86.25	16,064	(?)	(?)	231	8,217	30,476	23,371
Pennsylvania	48,191	74.55	41,074	3,926	245.80	2,883	69,059	280,685	214,804
Puerto Rico	36,255	9.05	3,911	1,913	26.14	331	57,560	226,436	181,595
Rhode Island	6,233	82.74	6,266				5,019	19,003	14,500
South Carolina	28,932	41.53	14,999	494	156.50	852	8,991	36,040	28,734
South Dakota	8,145	77.16	7,510				2,948	10,438	7,953
Tennessee	50,479	45.60	27,993	678	57.21	182	22,391	84,477	64,445
Texas	221,039	64.84	155,542				19,643	81,530	62,196
Utah	6,733	73.85	6,596	612	148.08	508	4,063	15,678	11,998
Vermont	5,483	72.98	4,796				1,345	4,880	3,668
Virgin Islands	532	33.89	222	88	18.10	24	3,302	1,043	877
Virginia	14,084	56.10	9,327				10,704	43,652	34,273
Washington	44,153	97.00	48,450	948	217.18	1,409	13,424	49,698	37,608
West Virginia	17,114	44.30	8,978	7,517	36.97	3,683	31,804	125,872	97,612
Wisconsin	31,578	87.63	34,784				11,168	41,814	32,096
Wyoming	2,750	78.35	2,649				764	2,875	2,233

¹ Includes as recipients the children and 1 parent or other adult relative in families in which the requirements of at least 1 such adult were considered in determining the amount of assistance.

Social Security Administration: Number of recipients and average payment, by program and State, fiscal year 1962

receiving only such payments; data corrected to October 15, 1962]

Aid to dependent children— Continued			Aid to the blind			Aid to the permanently and totally disabled		
Payments to recipients			Number of recip- ients, June	Payments to recipients		Number of recip- ients, June	Payments to recipients	
Average payment per family, June	Average payment per recipient, June	Total, fiscal year (in thousands)		Average payment, June	Total, fiscal year (in thousands)		Average payment, June	Total, fiscal year (in thousands)
\$110.78	\$29.11	\$1,021,097	107,978	\$72.85	\$92,309	362,815	\$65.96	\$271,208
116.70	30.29	1,118,991	105,601	73.36	93,991	383,675	68.21	301,361
123.14	31.48	1,338,603	100,398	77.47	92,819	417,042	72.00	334,528
45.35	11.19	11,089	1,628	43.93	842	12,753	40.85	5,998
86.38	25.14	1,677	98	77.20	90			
122.36	29.67	13,014	865	71.94	754			
62.16	16.12	4,885	1,967	61.17	1,358	7,706	48.32	3,900
108.61	45.26	178,448	12,886	121.72	17,909	21,978	100.79	21,258
134.01	34.65	13,054	248	86.83	250	5,647	71.85	4,718
159.40	42.26	21,397	301	99.34	385	2,349	123.41	3,614
91.40	21.79	2,482	265	76.51	221	450	64.50	342
151.92	33.27	9,887	196	69.92	171	3,049	75.27	2,499
62.04	16.67	18,710	2,523	62.28	1,866	12,908	66.03	9,197
86.84	23.17	17,237	3,217	52.20	2,179	24,567	51.34	14,555
67.36	12.42	145	6	(²)	2	84	24.85	26
148.46	36.28	4,894	83	99.66	86	1,037	107.83	1,165
156.32	41.45	4,478	130	73.51	119	1,994	67.74	1,348
199.86	46.46	125,553	2,883	91.39	3,115	27,167	98.49	26,261
108.78	28.72	15,705	1,850	76.68	1,702			
146.45	39.03	15,170	1,328	100.21	1,620	801	67.86	603
143.16	36.98	11,359	566	87.08	592	4,175	90.10	4,418
90.69	25.22	23,529	2,418	60.07	1,738	8,670	62.70	6,267
100.57	24.35	20,361	2,754	81.21	2,666	17,049	57.71	11,504
100.40	28.10	7,150	411	71.40	340	2,247	71.23	1,887
128.25	30.35	17,273	418	66.00	333	6,486	67.63	5,062
158.49	45.60	34,824	2,228	121.18	3,251	10,436	131.77	15,989
143.92	39.98	53,027	1,723	81.55	1,690	5,981	102.62	6,326
165.06	46.99	21,232	1,026	108.96	1,354	2,843	60.58	1,956
35.87	9.15	8,839	3,485	38.13	1,893	13,312	34.44	5,356
95.15	24.40	30,235	4,833	65.00	3,820	15,032	63.41	11,584
130.21	33.98	2,981	295	73.54	273	1,260	73.67	1,115
118.13	30.13	4,634	701	94.15	822	2,196	78.87	2,008
107.21	29.39	1,695	174	98.94	209			
166.55	41.89	2,092	246	95.72	263	488	106.13	564
172.75	47.52	39,340	930	88.78	965	7,533	94.65	7,512
122.86	31.23	11,272	362	69.57	283	2,898	72.80	2,390
177.12	42.76	184,879	3,347	96.61	3,963	35,383	110.21	46,990
87.26	22.06	28,941	5,045	56.59	3,400	21,275	61.72	14,465
153.64	40.95	3,413	88	80.40	81	1,247	103.70	1,422
116.93	29.37	47,321	3,438	80.35	3,198	15,400	79.77	13,051
124.32	34.01	28,222	1,746	104.75	2,056	10,855	98.81	12,362
137.83	37.16	14,025	315	94.37	298	4,886	92.65	5,345
130.73	32.17	107,256	17,857	74.68	16,079	18,476	64.13	13,327
14.79	3.76	10,298	1,687	8.33	173	22,350	8.75	2,325
51.16	39.92	9,265	114	84.42	115	2,740	86.24	2,964
57.20	14.27	6,242	1,699	48.85	993	8,144	45.32	4,443
103.71	29.29	3,652	149	63.77	117	1,109	65.04	861
69.88	18.52	19,043	2,504	46.28	1,443	11,522	45.68	6,150
78.87	19.00	18,115	5,345	61.86	4,310	7,741	54.00	4,926
133.37	34.56	6,913	173	78.10	175	3,676	77.84	3,165
110.10	30.34	1,718	106	61.70	79	874	63.85	656
56.87	16.47	205	16	(²)	6	96	34.08	41
99.13	24.31	12,606	1,175	62.64	867	6,553	62.09	4,834
148.63	40.15	24,759	675	108.86	814	8,419	94.70	7,971
109.20	27.59	37,307	935	47.32	522	7,327	45.62	3,834
168.35	44.96	19,539	880	94.26	946	7,200	104.91	5,430
140.86	37.43	1,314	60	80.78	55	573	78.90	541

² Average payment not computed on base of fewer than 50 recipients.

³ Less than \$500.

⁴ No payments made in June 1962.

Table 8.—Special types of public assistance under plans approved by expenditures and percent from Federal funds,

[Includes vendor payments for medical care; amounts

State	Federal grants to States ¹						Expenditures for assistance and administration	
	Total	Old-age assistance	Medical assistance for the aged	Aid to dependent children	Aid to the blind	Aid to the permanently and totally disabled	Old-age assistance	
							Amount	Percent from Federal funds
Fiscal year:								
1960	\$2,033,761	\$1,157,523	-----	\$660,232	\$48,824	\$167,182	\$2,014,736	58.1
1961	2,180,466	1,211,709	\$33,507	704,108	48,517	182,625	2,035,554	59.9
1962	2,466,974	1,256,388	109,866	853,685	47,483	199,552	2,020,168	62.8
Alabama	69,592	54,403	200	9,569	653	4,767	75,231	72.9
Alaska	1,865	748	-----	1,062	66	-----	1,267	59.8
Arizona	17,749	7,254	-----	9,968	527	-----	10,196	70.9
Arkansas	36,586	27,584	438	4,373	1,020	3,171	36,656	74.9
California	288,115	161,555	16,268	92,247	7,558	10,487	314,459	49.6
Colorado	41,749	29,280	-----	9,190	143	3,136	60,677	50.7
Connecticut	19,857	8,070	-----	10,281	152	1,355	20,074	42.0
Delaware	2,960	514	-----	2,031	149	265	764	66.9
Dist. of Col.	10,271	1,957	-----	6,716	102	1,495	3,250	59.4
Florida	62,485	38,035	-----	10,365	1,319	6,766	52,918	71.7
Georgia	68,951	41,740	-----	14,204	1,725	11,282	56,537	73.7
Guam	125	25	-----	81	2	17	42	50.0
Hawaii	4,749	732	354	3,086	51	525	1,096	65.8
Idaho	8,721	3,741	1,289	2,582	81	1,027	5,477	69.7
Illinois	120,743	42,765	646	62,961	1,691	12,681	72,739	59.3
Indiana	27,090	14,149	-----	11,837	1,104	-----	22,525	65.2
Iowa	33,140	21,588	-----	10,277	801	474	35,296	61.8
Kansas	27,855	17,897	-----	7,205	336	2,416	28,852	61.8
Kentucky	52,722	27,141	253	19,138	1,336	4,854	36,833	73.4
Louisiana	118,088	82,149	1,614	23,347	1,659	9,320	119,034	70.5
Maine	14,146	6,675	360	5,549	230	1,333	9,590	71.1
Maryland	22,402	4,998	842	13,035	216	3,312	7,945	64.3
Massachusetts	84,227	37,105	22,319	17,864	1,205	5,734	67,902	57.3
Michigan	75,147	32,375	9,031	29,721	895	3,126	55,323	60.2
Minnesota	42,295	29,267	-----	10,961	612	1,455	54,553	55.2
Mississippi	41,769	27,601	-----	8,101	1,516	4,552	35,758	76.9
Missouri	90,403	57,240	-----	22,920	2,195	8,048	85,186	67.1
Montana	6,394	3,434	-----	2,034	181	745	5,356	65.9
Nebraska	13,998	8,767	-----	3,505	421	1,305	13,793	65.0
Nevada	2,862	1,459	-----	1,295	108	-----	2,574	58.7
New Hampshire	4,927	3,158	111	1,226	143	288	5,439	59.3
New Jersey	34,705	10,490	-----	19,891	522	3,803	20,184	53.7
New Mexico	17,196	6,820	-----	8,446	214	1,715	9,574	71.9
New York	203,023	36,118	42,669	101,648	2,054	20,534	67,507	58.4
North Carolina	59,616	21,571	-----	24,489	2,712	10,845	29,018	74.4
North Dakota	8,627	4,706	1,047	2,087	59	728	7,220	66.1
Ohio	95,322	50,839	-----	34,478	1,939	8,066	88,906	59.7
Oklahoma	88,846	61,107	476	19,772	1,047	6,444	89,248	68.4
Oregon	22,034	10,038	1,187	7,889	152	2,768	17,569	59.7
Pennsylvania	119,569	26,608	4,395	77,012	3,064	8,491	44,548	61.9
Puerto Rico	8,875	1,997	-----	5,431	101	1,345	4,492	46.2
Rhode Island	11,414	4,061	-----	5,634	66	1,653	6,855	60.3
South Carolina	22,447	11,926	770	5,509	760	3,482	15,884	75.7
South Dakota	9,329	5,498	-----	3,058	93	680	8,021	70.6
Tennessee	44,852	22,108	244	16,473	1,121	4,906	29,798	75.1
Texas	137,702	115,251	-----	15,371	3,227	3,852	160,501	71.3
Utah	11,670	4,493	396	4,835	107	1,838	6,979	67.9
Vermont	5,458	3,511	-----	1,372	63	512	5,070	70.4
Virgin Islands	310	143	14	121	5	27	261	49.9
Virginia	22,599	7,515	-----	10,552	669	3,864	10,125	74.8
Washington	50,140	28,738	565	16,432	386	4,018	51,173	55.9
West Virginia	44,954	7,304	4,377	29,615	407	3,251	9,465	76.9
Wisconsin	33,360	20,398	-----	10,001	498	2,463	37,541	56.0
Wyoming	2,947	1,745	-----	839	31	332	2,895	61.4

¹ Based on cash advanced for the year; may differ slightly from fiscal-year expenditures from Federal funds reported by States.² Less than \$500.

the Social Security Administration: Federal grants to States and total by program and State, fiscal year 1962

in thousands; data corrected to October 15, 1962]

Expenditures for assistance and administration—Continued							
Medical assistance for the aged		Aid to dependent children		Aid to the blind		Aid to the permanently and totally disabled	
Amount	Percent from Federal funds	Amount	Percent from Federal funds	Amount	Percent from Federal funds	Amount	Percent from Federal funds
		\$1,130,515	58.9	\$100,203	48.9	\$302,925	55.8
\$45,899	49.8	1,240,092	57.8	102,212	47.6	335,615	54.7
208,752	50.7	1,488,491	56.8	101,493	46.9	373,350	54.0
145	74.2	12,162	79.4	888	74.2	6,494	74.3
		1,775	60.8	99	55.2		
		13,430	73.6	793	64.7		
436	74.4	5,290	79.8	1,411	72.1	4,324	72.9
19,365	50.0	206,966	44.7	19,926	37.0	25,119	42.3
		14,973	60.6	274	53.3	5,303	59.5
1,283	34.4	23,623	43.9	410	39.2	3,945	34.3
		2,765	72.7	256	58.4	406	62.3
		10,897	60.3	185	59.5	2,710	55.7
		20,593	79.4	1,974	68.0	10,132	66.7
		18,655	75.6	2,323	72.4	15,786	72.1
(?)	50.0	155	50.0	2	40.9	31	50.0
839	53.2	5,547	57.6	114	48.6	1,283	42.1
1,955	65.0	4,800	54.3	127	64.0	1,481	70.2
675	50.0	137,943	45.3	3,567	47.1	29,146	42.7
		17,545	67.9	2,010	55.0		
		16,749	90.8	1,763	45.6	717	64.3
		12,419	57.1	1,643	52.1	4,816	50.7
453	67.6	25,065	75.3	1,864	71.5	6,753	70.9
485	66.7	30,231	73.9	2,834	58.6	13,463	69.6
		7,720	73.5	355	68.2	2,057	65.1
408	66.4	19,175	66.4	352	63.3	5,426	62.7
1,953	50.0	38,755	44.2	3,457	35.1	17,578	33.0
43,855	48.6	56,530	52.4	1,737	51.9	6,757	45.7
17,578	50.0	23,335	47.3	1,448	42.1	2,153	67.4
		10,240	77.9	2,020	75.3	6,119	74.7
		32,798	71.8	4,171	53.5	12,372	65.1
		3,320	61.2	323	57.8	1,305	58.8
		4,971	68.7	894	47.9	2,237	56.8
		1,940	65.8	244	44.0		
14	57.5	2,323	52.0	286	49.4	662	44.8
		43,475	44.6	1,111	48.4	8,786	44.8
		12,346	69.1	307	71.4	2,674	64.5
105,402	49.9	212,811	47.4	4,820	44.3	54,109	39.7
		31,359	76.5	3,863	70.3	15,608	71.2
1,609	69.1	3,780	54.5	97	61.0	1,593	47.4
		51,510	66.3	3,733	53.8	14,967	55.4
918	65.9	29,636	66.7	2,136	49.2	13,158	49.1
386	51.4	15,819	50.4	324	46.7	5,921	47.2
2,935	50.0	118,664	63.2	17,030	18.6	15,122	59.8
341	50.0	11,633	46.3	214	47.1	2,846	47.1
		10,219	52.4	129	50.9	3,299	49.3
1,054	74.3	6,843	79.5	1,068	72.6	4,827	72.9
		4,095	72.5	130	70.1	959	69.9
379	62.5	20,763	78.2	1,532	73.4	6,716	72.9
		19,688	77.8	4,493	69.7	5,513	69.4
534	62.8	7,686	61.6	182	58.1	3,361	56.2
		1,910	71.3	87	70.6	727	70.0
43	50.0	256	49.8	8	50.0	47	49.5
		14,035	73.8	961	70.4	5,484	69.8
1,467	49.8	27,383	56.5	872	43.4	8,636	47.1
4,239	67.7	38,893	74.8	550	73.7	4,225	73.0
		21,482	47.4	1,046	48.5	6,002	41.8
		1,514	54.0	60	54.0	594	53.8

Table 9.—Maternal and child health and welfare services: Grants for maternal and child health services, services for crippled children, child welfare services, and research or demonstration projects in child welfare under the Social Security Act, by program and State, fiscal year 1962¹

[In thousands]

State	Maternal and child health services	Crippled children's services	Child welfare services
United States.....	\$23,851.7	\$24,093.5	\$18,645.9
Alabama.....	684.4	766.4	472.5
Alaska.....	173.9	148.8	69.7
Arizona.....	232.5		184.8
Arkansas.....	386.9	403.6	283.5
California.....	1,338.0	1,080.9	1,027.6
Colorado.....	423.2	304.6	208.2
Connecticut.....	396.2	286.2	182.9
Delaware.....	130.1	129.6	77.4
District of Columbia.....	311.2	280.2	89.2
Florida.....	774.1	584.3	453.7
Georgia.....	734.2	841.9	533.9
Guam.....	68.7	52.0	7.8
Hawaii.....	180.4	181.9	115.4
Idaho.....	190.6	162.9	95.3
Illinois.....	673.3	748.0	700.9
Indiana.....	373.6	572.2	444.5
Iowa.....	307.0	498.7	315.9
Kansas.....	260.5	287.3	251.5
Kentucky.....	548.7	526.7	430.5
Louisiana.....	480.5	569.7	446.0
Maine.....	177.7	155.2	149.7
Maryland.....	451.3	465.7	296.6
Massachusetts.....	416.3	452.3	404.4
Michigan.....	920.9	954.3	733.9
Minnesota.....	509.4	693.7	380.9
Mississippi.....	625.4	565.0	362.3
Missouri.....	523.3	442.1	411.4
Montana.....	141.7	193.3	119.6
Nebraska.....	140.5	121.3	184.2
Nevada.....	123.2	82.3	71.7
New Hampshire.....	108.9	124.0	100.1
New Jersey.....	354.7	276.6	418.1
New Mexico.....	254.9	217.7	160.5
New York.....	1,179.3	894.5	1,010.7
North Carolina.....	889.0	1,011.4	631.6
North Dakota.....	140.2	145.1	130.1
Ohio.....	1,005.0	910.5	818.8
Oklahoma.....	381.1	366.9	283.7
Oregon.....	212.3	239.0	206.3
Pennsylvania.....	1,091.1	1,130.8	939.5
Puerto Rico.....	531.3	654.3	440.5
Rhode Island.....	220.1	178.0	120.9
South Carolina.....	527.0	583.1	400.4
South Dakota.....	63.4	140.5	130.5
Tennessee.....	666.8	727.0	471.7
Texas.....	1,036.0	1,485.0	1,039.6
Utah.....	138.8	164.4	156.8
Vermont.....	125.7	128.0	91.9
Virgin Islands.....	108.7	108.6	56.3
Virginia.....	753.1	695.1	472.4
Washington.....	389.4	320.3	284.9
West Virginia.....	431.1	404.4	278.8
Wisconsin.....	417.5	513.4	413.2
Wyoming.....	128.6	125.8	82.7

¹ Based on checks issued basis. Additional payments were made for special project grants to institutions of higher learning and to public or other non-profit agencies and organizations as follows: maternal and child health services, \$986.0; services for crippled children, \$544.1; research or demonstration projects in child welfare, \$131.3.

Table 10.—Federal credit unions: Assets, liabilities, and capital, Dec. 31, 1960, and Dec. 31, 1961

Assets, liabilities, and capital	Amount			Percentage distribution	
	Dec. 31, 1961	Dec. 31, 1960	Change during year	Dec. 31, 1961	Dec. 31, 1960
Number of operating Federal credit unions.....	10, 271	9, 905	366	-----	-----
Total assets.....	\$3, 028, 293, 938	\$2, 669, 734, 298	\$358, 559, 640	100. 0	100. 0
Loans to members.....	2, 245, 223, 299	2, 021, 463, 195	223, 760, 104	74. 2	75. 7
Cash.....	190, 190, 576	157, 615, 757	32, 574, 819	6. 3	5. 9
U.S. Government obligations.....	94, 652, 577	93, 577, 264	1, 075, 313	3. 1	3. 5
Savings and loan shares.....	412, 428, 717	306, 249, 764	106, 178, 953	13. 6	11. 5
Loans to other credit unions.....	54, 943, 499	61, 701, 066	-6, 757, 567	1. 8	2. 3
Land and buildings.....	11, 861, 150	9, 699, 908	2, 161, 242	. 4	. 4
Other assets.....	18, 994, 120	19, 427, 344	-433, 224	. 6	. 7
Total liabilities and capital.....	3, 028, 293, 938	2, 669, 734, 298	358, 559, 640	100. 0	100. 0
Notes payable.....	59, 698, 027	71, 275, 679	-11, 577, 652	2. 0	2. 7
Accounts payable and other liabilities.....	16, 151, 362	12, 372, 686	3, 778, 676	. 5	. 4
Shares.....	2, 673, 488, 298	2, 344, 337, 197	329, 151, 101	88. 3	87. 8
Regular reserve.....	133, 939, 870	111, 703, 332	22, 236, 538	4. 4	4. 2
Special reserve for delinquent loans.....	4, 604, 374	4, 456, 218	148, 156	. 2	. 2
Other reserves ¹	7, 645, 471	5, 899, 292	1, 746, 179	. 2	. 2
Undivided earnings ²	132, 766, 536	119, 689, 894	13, 076, 642	4. 4	4. 5

¹ Reserve for contingencies and special reserve for losses.² Before payment of yearend dividends.Table 11.—Federal credit unions: Selected data on operations, as of Dec. 31, for each year 1934-61¹

Year	Number of operating Federal credit unions	Number of members	Assets	Shares	Loans outstanding
1934 ²	39	3, 240	\$23, 300	\$23, 100	\$15, 400
1935.....	772	119, 420	2, 372, 100	2, 228, 400	1, 834, 200
1936.....	1, 751	309, 700	9, 158, 100	8, 510, 900	7, 343, 800
1937.....	2, 313	483, 920	19, 264, 700	17, 649, 700	15, 695, 300
1938.....	2, 760	632, 050	29, 629, 000	26, 876, 100	23, 830, 100
1939.....	3, 182	850, 770	47, 810, 600	43, 326, 900	37, 673, 000
1940.....	3, 756	1, 127, 940	72, 530, 200	65, 805, 800	55, 818, 300
1941.....	4, 228	1, 408, 880	106, 052, 400	97, 208, 900	69, 484, 700
1942.....	4, 145	1, 356, 940	119, 591, 400	109, 822, 200	43, 052, 500
1943.....	3, 938	1, 311, 620	127, 329, 200	117, 339, 100	35, 376, 200
1944.....	3, 815	1, 306, 000	144, 365, 400	133, 677, 400	34, 438, 400
1945.....	3, 757	1, 216, 625	153, 103, 120	140, 613, 962	35, 155, 414
1946.....	3, 761	1, 302, 132	173, 166, 459	159, 718, 040	56, 800, 937
1947.....	3, 845	1, 445, 915	210, 375, 571	192, 410, 043	91, 372, 197
1948.....	4, 058	1, 628, 339	258, 411, 736	235, 008, 368	137, 642, 327
1949.....	4, 495	1, 819, 606	316, 362, 504	285, 000, 934	186, 218, 022
1950.....	4, 984	2, 126, 823	405, 834, 976	361, 924, 778	263, 735, 838
1951.....	5, 398	2, 463, 898	504, 714, 580	457, 402, 124	299, 755, 775
1952.....	5, 925	2, 853, 241	662, 408, 869	597, 374, 117	415, 062, 315
1953.....	6, 578	3, 255, 422	854, 232, 007	767, 571, 092	573, 973, 529
1954.....	7, 227	3, 598, 790	1, 033, 179, 042	931, 407, 456	681, 970, 336
1955.....	7, 806	4, 032, 220	1, 267, 427, 045	1, 135, 164, 876	803, 042, 049
1956.....	8, 350	4, 502, 210	1, 529, 201, 927	1, 366, 258, 073	1, 049, 188, 549
1957.....	8, 735	4, 897, 689	1, 788, 768, 332	1, 589, 190, 585	1, 257, 319, 328
1958.....	9, 030	5, 209, 912	2, 034, 865, 575	1, 812, 017, 273	1, 379, 723, 727
1959.....	9, 447	5, 643, 248	2, 352, 813, 400	2, 075, 055, 019	1, 666, 525, 512
1960.....	9, 905	6, 087, 378	2, 669, 734, 298	2, 344, 337, 197	2, 021, 463, 195
1961.....	10, 271	6, 542, 603	3, 028, 293, 938	2, 673, 488, 298	2, 245, 223, 299

¹ Data for 1934-44 on membership, assets, shares, and loans outstanding are partly estimated.² First charter approved Oct. 1, 1934.

Table 12.—Federal credit unions: Selected data on operations, by asset size and State, 1961

Asset size and State	Number of credit unions	Number of members	Total assets (thousands)	Amount of members' shares		Amount of loans to members		
				Total (thousands)	Average 1 per member	Made during 1961		Outstanding as of Dec. 31, 1961 (thousands)
						Total (thousands)	Average 1	
All credit unions.....	10, 271	6, 542, 603	\$3, 028, 294	\$2, 673, 488	\$409	\$3, 134, 278	\$672	\$2, 245, 223
Credit unions with assets of:								
Less than \$5,000.....	614	45, 101	1, 536	1, 434	32	1, 525	126	995
\$5,000-\$9,999.....	575	60, 915	4, 301	3, 859	63	5, 193	177	3, 107
\$10,000-\$24,999.....	1, 258	178, 993	21, 356	18, 805	105	28, 949	257	16, 116
\$25,000-\$49,999.....	1, 356	204, 114	40, 437	43, 346	164	63, 023	348	38, 038
\$50,000-\$99,999.....	1, 616	438, 955	117, 429	102, 536	234	136, 462	454	89, 679
\$100,000-\$249,999.....	2, 130	689, 938	344, 584	302, 331	322	361, 923	507	257, 878
\$250,000-\$499,999.....	1, 247	1, 001, 809	442, 554	388, 852	388	463, 124	634	333, 838
\$500,000-\$999,999.....	819	1, 171, 326	570, 548	503, 892	430	565, 266	702	424, 283
\$1,000,000-\$1,999,999.....	421	1, 063, 938	581, 590	511, 999	481	560, 839	766	438, 589
\$2,000,000-\$4,999,999.....	192	843, 522	536, 856	477, 575	566	539, 753	825	390, 080
\$5,000,000 and over.....	43	533, 992	358, 103	318, 799	597	339, 221	907	252, 619
Credit unions located in:								
Alabama.....	172	88, 119	36, 761	32, 358	367	41, 215	532	27, 767
Alaska.....	30	25, 148	9, 107	8, 319	331	11, 453	564	7, 440
Arizona.....	77	73, 263	36, 315	32, 108	439	44, 293	708	31, 849
Arkansas.....	61	24, 343	8, 225	7, 437	307	12, 162	551	6, 754
California.....	1, 056	852, 214	441, 302	393, 828	462	455, 581	742	347, 402
Canal Zone.....	7	11, 938	3, 188	2, 865	240	3, 946	210	1, 759
Colorado.....	144	93, 349	44, 566	39, 358	422	49, 063	803	36, 910
Connecticut.....	302	218, 255	124, 109	110, 920	508	107, 394	650	74, 245
Delaware.....	40	21, 946	7, 697	6, 716	306	8, 003	642	6, 403
District of Columbia.....	141	233, 352	105, 997	92, 795	398	114, 562	755	86, 190
Florida.....	280	206, 610	85, 636	75, 608	366	100, 591	590	70, 099
Georgia.....	182	102, 436	37, 028	32, 193	314	48, 052	456	28, 152
Hawaii.....	164	116, 199	82, 331	73, 420	632	80, 493	965	57, 844
Idaho.....	57	29, 013	13, 767	12, 084	417	13, 665	746	11, 610
Illinois.....	217	114, 546	57, 785	51, 798	462	53, 003	714	38, 044
Indiana.....	339	203, 568	105, 773	95, 222	468	95, 928	656	62, 491
Iowa.....	6	3, 887	2, 263	2, 089	537	2, 211	884	1, 675
Kansas.....	80	60, 230	30, 464	27, 130	450	28, 031	801	24, 728
Kentucky.....	74	28, 725	10, 374	9, 390	327	11, 313	548	7, 202
Louisiana.....	297	143, 430	62, 418	54, 995	383	66, 243	620	45, 926
Maine.....	107	61, 806	27, 113	23, 240	376	29, 793	668	20, 121
Maryland.....	144	102, 085	34, 250	30, 219	296	40, 681	492	27, 756
Massachusetts.....	287	145, 442	55, 095	49, 411	340	53, 383	539	37, 512

Michigan.....	411	442,519	244,173	213,131	482	225,598	880	187,347
Minnesota.....	43	23,538	8,949	7,865	334	8,237	696	7,225
Mississippi.....	87	47,254	17,952	15,009	330	22,421	480	15,021
Missouri.....	44	28,093	12,981	11,089	416	11,754	612	8,215
Montana.....	106	38,951	16,209	13,864	356	14,581	710	12,921
Nebraska.....	86	51,814	24,084	21,385	413	24,765	797	18,139
Nevada.....	58	30,134	14,259	12,471	414	17,504	739	11,932
New Hampshire.....	25	18,448	6,830	6,145	333	7,419	552	5,169
New Jersey.....	457	255,350	100,273	96,559	378	94,754	593	69,965
New Mexico.....	48	46,517	23,263	20,393	438	30,208	764	18,824
New York.....	912	521,765	225,674	200,124	384	218,352	671	159,720
North Carolina.....	47	37,217	9,671	8,442	227	12,651	417	8,031
North Dakota.....	32	11,185	4,489	3,947	353	3,948	655	3,649
Ohio.....	545	331,029	147,294	130,521	394	143,009	695	103,303
Oklahoma.....	117	62,648	30,703	27,110	433	33,194	764	24,613
Oregon.....	179	78,988	35,297	30,865	391	40,227	778	29,689
Pennsylvania.....	1,030	553,513	223,664	194,038	351	231,061	624	152,104
Puerto Rico.....	35	16,583	5,126	4,369	263	6,352	373	4,417
Rhode Island.....	19	6,530	2,906	2,623	402	2,698	700	1,412
South Carolina.....	73	46,209	9,801	8,880	192	16,286	340	8,392
South Dakota.....	90	31,624	14,262	12,598	398	16,552	826	10,921
Tennessee.....	184	105,584	53,968	47,858	453	65,361	627	38,973
Texas.....	785	490,490	228,877	199,843	407	206,429	665	177,738
Utah.....	84	35,979	18,294	16,180	450	21,135	835	15,449
Vermont.....	3	1,351	537	457	338	462	276	276
Virginia.....	158	94,263	30,707	26,616	282	36,218	513	24,267
Virgin Islands.....	4	1,494	167	145	97	132	397	150
Washington.....	173	112,898	59,898	53,177	471	61,792	775	47,131
West Virginia.....	113	40,259	16,715	14,535	361	20,340	571	12,531
Wisconsin.....	4	995	403	355	357	20,255	527	12,332
Wyoming.....	55	19,477	9,144	8,141	418	9,564	884	7,488

1 Based on unrounded data.

Public Health Service

Health of the Nation

AS THE FEDERAL AGENCY principally concerned with protecting and advancing the Nation's health, the Public Health Service has a two-fold obligation. It must concentrate on the urgent health needs of today, while looking to and preparing for emerging needs and long range goals.

Both parts of this obligation are heavily affected by the change and growth which are such notable characteristics of our present society: growth of the population, and change in its composition; growth of industries and cities, of medical science and health knowledge, of techniques and resources; change in the way people live and work and use their leisure time.

Responding to this changing scene and its implications for the future, the Public Health Service is placing major emphasis on several broad problem areas.

They include environmental health and community health services. Last year's annual report called special attention to these two topics, and the progress that has been made on them is discussed in detail in the appropriate sections of this report.

Other broad areas which are receiving major attention include health manpower, where the need is great and will become more serious; research, which must be continued and accelerated; scientific communications, where the object is to speed the application of new knowledge in the health care of the people; the chronic conditions—heart disease, mental illness, cancer, and the others high on the list of causes of death or disability and of special import to the aged.

The Service's attacks on such problems are multifaceted. Typically they cut across more than one of the three major Bureaus and involve Divisions of the Office of the Surgeon General.

Illustrative of both the need for this approach and the conduct of it is the realm of scientific communications. Here, the rapidly accelerating research effort—world wide in scope—is reporting results in

such scope and volume that existing communication systems are not adequate to cope with the torrent of information.

The Service's response includes a vital action by the National Library of Medicine—the design, development, and installation of an electronic storage and retrieval system known as MEDLARS (Medical Literature Analysis and Retrieval System).

The completion of this project will give the medical sciences in the United States access to a powerful tool unequaled elsewhere in the world. MEDLARS will provide a base for the centralized preliminary processing of information now conducted under circumstances of duplication and economic waste by multiple independent secondary publications. Further, it will constitute a new key to medical libraries generally, and, when coupled with photoduplication service, will enable libraries to meet modern research requirements for information with unprecedented effectiveness. The impact of the MEDLARS system on future developments in electronic storage and retrieval in particular, and on the structure of medical communication in general, is expected to be considerable.

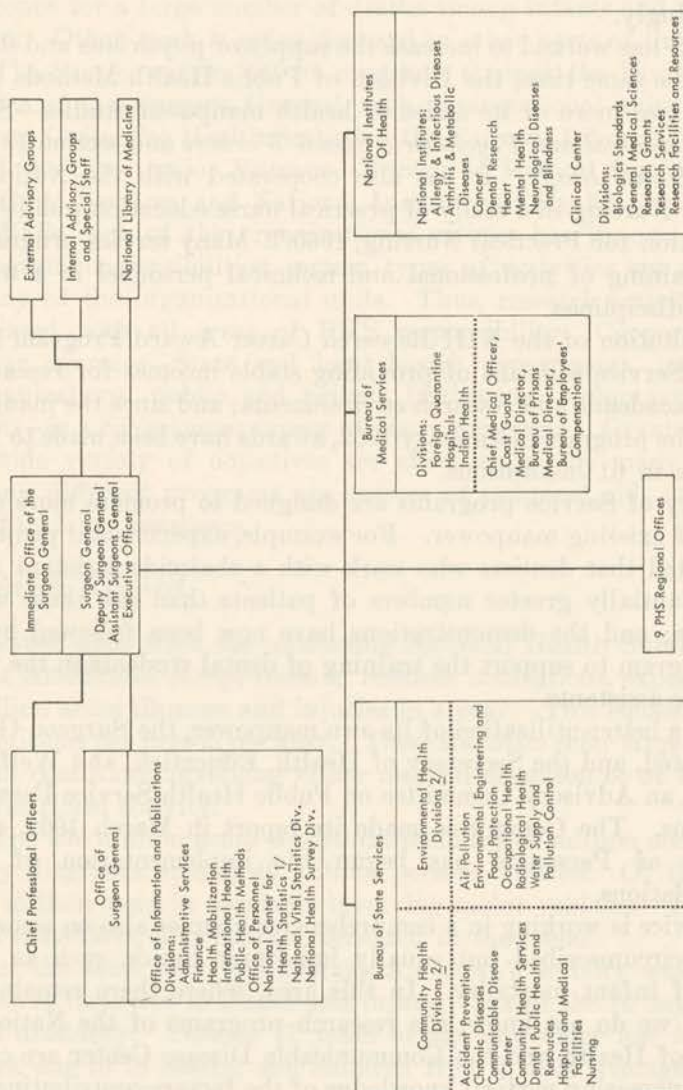
At the same time, the National Center for Health Statistics has completed installation of its computer facilities—modern data processing equipment which will result in more timely reporting of the health intelligence embodied in the national vital and health statistics produced by the Center.

Also, during the year the National Institutes of Health published for the first time a *Research Grants Index*. This is a comprehensive listing of the scientists supported through PHS research grants programs, and it contains an index to the content of their work. It is unique in that it refers to work in progress rather than work that is described—months or even years after its completion—in published papers. Since the Service supports about half of all the medical research in the United States, plus some in other countries, the Index will help greatly to solve the mounting problem of keeping up with who is doing what and where it is being done.

Other programs in all three Bureaus are aimed at the scientific communications problem. The importance of the subject has been recognized organizationally by the formalization in the Office of the Surgeon General of the Office of Information and Publications, and the Surgeon General has scheduled for the fall of 1962 a meeting at which representatives of the health professions can discuss PHS actions and proposals and relate them to the responsibilities of other organizations and groups.

Another broad area which provides an example of action on several fronts is that of health manpower—which has been the subject of con-

CHART 1.—PUBLIC HEALTH SERVICE—1962



July 1, 1962

^{1/}Separate organizational status similar to the National Library of Medicine is proposed under the reorganization plan.^{2/}These groupings would become bureaus under the reorganization plan.

tinuing and increasing Public Health Service attention. The Service recognizes that the need is both quantitative—in terms of the greater number of people that are required—and qualitative—in terms of the kinds and varieties of personnel needed—and is working on the problem accordingly.

The PHS has worked to increase the supply of physicians and dentists. At the same time, the Division of Public Health Methods has completed two more of its series of health manpower studies—Section 12 on *Medical and Psychiatric Social Workers* and section 13 on *Hospital House Staffs*. It has also cooperated with the National League for Nursing in a study of practical nurse education published as "Education for Practical Nursing, 1960." Many service programs support training of professional and technical personnel in a wide variety of disciplines.

The institution of the NIH Research Career Award Program has given the Service a means of providing stable incomes for research careers in academic and research environments; and since the inauguration of the program in January 1962, awards have been made to 106 individuals in 61 institutions.

A variety of Service programs are designed to promote more efficient use of existing manpower. For example, experimental projects demonstrated that dentists who work with a chairside assistant can treat substantially greater numbers of patients than can those who work alone; and the demonstrations have now been followed by a grants program to support the training of dental students in the use of chairside assistants.

Toward a better utilization of its own manpower, the Surgeon General requested, and the Secretary of Health, Education, and Welfare appointed, an Advisory Committee on Public Health Service Personnel Systems. The Committee made its report in March 1962, and the Office of Personnel has begun the implementation of its recommendations.

The Service is working in a comprehensive manner also on some of the more circumscribed but equally important topics, such as the problem of infant mortality. In this area, where there remains a great deal we do not know, the research programs of the National Institutes of Health and the Communicable Disease Center are continuously increasing medical knowledge of the factors contributing to infant mortality.

The cooperative study now being sponsored by NIH, for example, is accumulating data related particularly to asphyxia in the newborn and congenital malformations. This study is certain to produce findings that will lead to the prevention of many infant deaths due to these causes. The Communicable Disease Center is conducting research

and developing control measures affecting the infectious diseases of infancy, particularly infant diarrhea and hospital-acquired infections. The accident prevention program also is cooperating in efforts to reduce the toll of accidental poisoning and home conflagrations which account for a large number of deaths among infants and young children. Other work is going forward in other parts of the PHS.

The Service carries out its programs through the Divisions of the Office of the Surgeon General, such organizational units as the National Center for Health Statistics, the National Library of Medicine, and the three major Bureaus—Bureau of Medical Services, Bureau of State Services, and National Institutes of Health.

While each of the organizational entities has its own particular program responsibilities, certain types of activities are common to many of the organizational units. Thus, research activities are associated with all areas of PHS responsibility. Cooperation with other agencies—State and local health departments, international organizations, public and private institutions, voluntary organizations—is a conspicuous aspect of many programs. Grants-in-aid for a wide variety of objectives are administered by many Divisions. Many different programs are sources of technical aid, consultation, and training assistance.

Health Record

Latest data from the continuing National Health Survey indicate that Americans, except those in resident institutions, experienced 359 million acute illnesses and injuries in a year. This equals about two conditions per person per year. These statistics refer largely to short-term conditions involving either medical attention or at least a day of restricted activity.

The 359 million acute conditions included 50 million accidental injury diagnoses among 45 million persons injured. Of the injured, 2.9 million were in accidents involving motor vehicles. The bulk of the remainder, 20.2 million, occurred in the home.

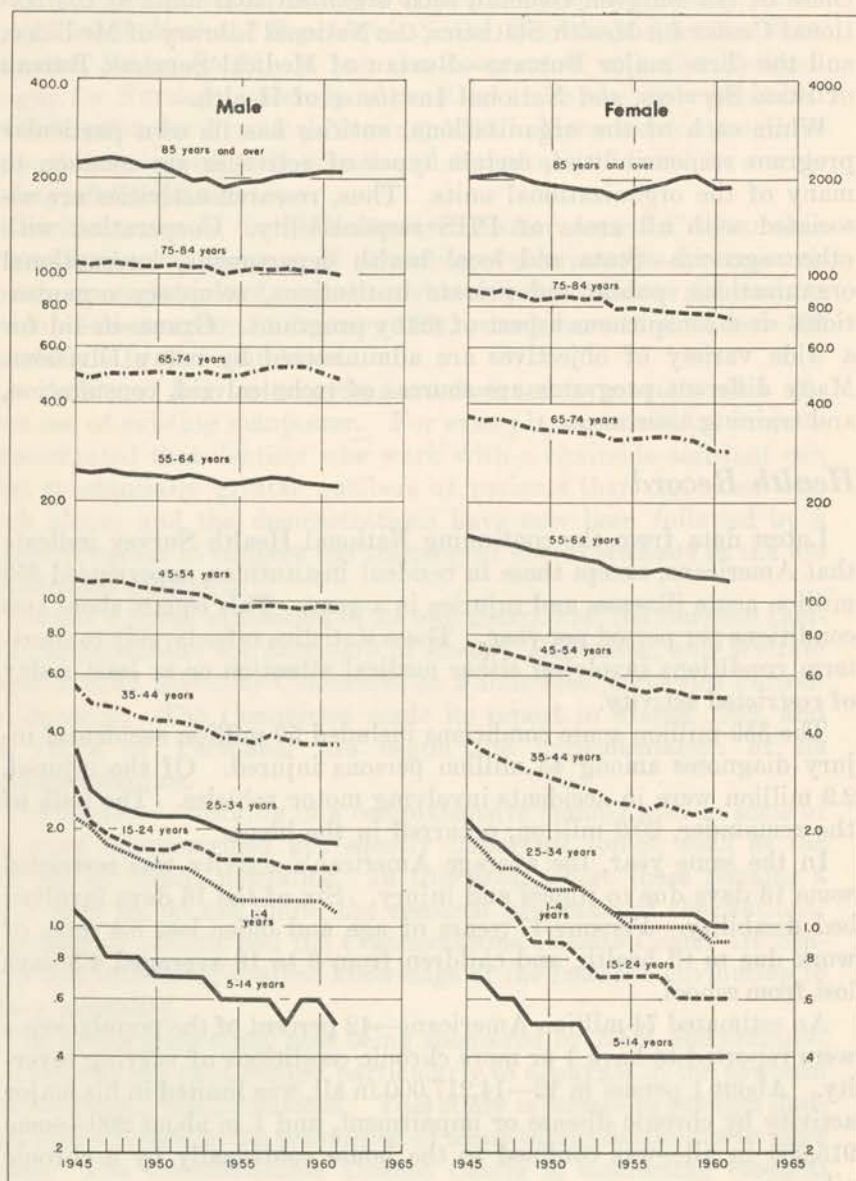
In the same year, the average American's activity was restricted some 16 days due to illness and injury. Six of the 16 days involved bed disability. Persons 17 years of age and older lost 5.4 days of work due to ill health, and children from 6 to 16 averaged 4.8 days lost from school.

An estimated 74 million Americans—42 percent of the population—were reported to have 1 or more chronic conditions of varying severity. About 1 person in 12—14,217,000 in all, was limited in his major activity by chronic disease or impairment, and 1 in about 200—some 915,000 in all—was confined to the house continually by a chronic ailment.

After a long period of decline, the trend of the crude death rate appears to have leveled off. This phenomenon is not peculiar to this Nation: it seems to be occurring also in such countries as England and Wales, Finland, Norway, Sweden, Denmark, Japan, and Chile.

The 1957 rate for the United States—9.6 per 100,000 population was

CHART 2.—DEATH RATES BY AGE AND SEX, 1945–61
(Rates per 100,000 population)



almost 5 percent larger than the 1954 rate of 9.2, which was an all-time low. In 1961, the crude rate stood at 9.3.¹

Crude rates are calculated on the total population of each period covered. This population almost invariably changes in composition over the years in ways that may affect crude rates. Thus, the greatest risk of dying occurs in infancy and in old age, and our present population is simultaneously growing both older and younger in composition. The proportion of the population over 65 probably has been increasing since the 18th century, while the proportion under 5 years of age has been increasing for more than 25 years.

Since the leveling off of the crude death rate is also evident in the age-adjusted rate, the failure to decline cannot be ascribed to the changing age composition of the population. The 1961 age-adjusted death rate stands at 7.3 compared to the 1954 rate of 7.7. In recent years both the crude and the age-adjusted rates have varied only slightly from year to year, and almost entirely according to the presence or absence of respiratory disease outbreaks during the year.

Obviously it is impossible for the death rate to decline indefinitely. But present levels of death rates in various countries do not seem to be at the irreducible minima, nor do they appear to be due to artifacts of registration or other technicalities; and an intensive study and evaluation of the situation is in order.

For the United States, a primary reason cannot be found in the fact that death rates already are extremely low, since a number of countries have still lower rates.

A general resistance to decline in recent years is evident as far as age and sex are concerned. Since the curves of the chart are drawn on a uniform logarithmic (ratio) scale, direct comparison between curves or any of their parts can be made by comparing degrees of slope. In no age group is the rate of decline greater since 1954 than before. The chart also shows that male death rates by age in general have declined less rapidly since 1954 than the rates for females. Closer study of the data also shows that the divergence between the sexes by age and color groups is greater over the 7 years since 1954 than over the 7 preceding years, except for persons aged 15-34 (whites) and 15-24 (nonwhites). Males, then, not only have lagged behind females but at present they are falling even further behind. In what areas?

The four leading causes of death are now diseases of the heart, malignant neoplasms ("cancer"), vascular lesions affecting the central nervous system ("strokes"), and accidents. In terms of age-adjusted rates, these four causes accounted for a little over 68 percent of all deaths about 10 years ago, compared to about 72 percent now, so

¹ All vital data are for calendar years.

that their importance is increasing. While sizeable declines were recorded for white and nonwhite male groups when the four leading causes were excluded, these declines were nevertheless smaller than those scored by the female groups.

For each of the four leading causes of death, males in each color group have fared less well in recent years than females. For diseases of the heart there was virtually no change in the male rates while each of the female rates was decreasing about 10 percent. For cancer, male rates increased while female rates were unchanged or decreased. For stroke, a decline for white males was surpassed by a greater decline for white females, while nonwhite males had an increase compared to a decrease for nonwhite females. For accidents, the decline registered by each female group was greater than those scored by the comparable male group.

About 1 infant in 40 died within a year of birth in 1961, compared to 1 in 10 during 1915. But while the infant death rate declined by 25 percent or more for every 10-year period until 1950, since then this rate of decline has been sharply reduced. Although the 1961 rate of 25.3 per 1,000 live births is the lowest yet recorded in the United States, the curve nevertheless is declining more slowly over recent years; nor is the rate as low as that in some other countries.

The maternal death rate—31.7 per 10,000 live births in 1941—reached 7.5 in 1951 and 3.7 in 1961. This rate has declined so far that it may be pressing against a virtually irreducible lower limit.

As a summary expression of all the forces working to extend or shorten life, in 1961 for the first time the life expectancy of the country's total population at birth exceeded 70 years, reaching 70.2. This compares to 68.4 in 1951 and 64.8 in 1941, giving gains of 2.6 and 5.6 percent for the later and the earlier periods.

In 1960, life expectancy by color and sex was as follows: white males, 67.4 years; white females, 74.1 years; nonwhite males, 61.1 years; and nonwhite females, 66.3 years. In recent years the average length of life has been increasing at a faster rate for women than for men, and at a faster rate for the nonwhite population than for the white population.

Births, Marriages, and Divorces

The total of 4,268,326 live births registered in 1961 were only slightly more than the 4,257,850 births of 1960. Since the number of births has not changed much during the past 5 years, and the population has continued to grow, the crude birth rate has declined somewhat each year since 1957. The rate was 25.0 per 1,000 live births in that year, 23.7 in 1960, and 23.3 in 1961.

The fertility rate, or number of live births per 1,000 women 15-44 years of age, also has declined somewhat annually since 1957. The 121.2 rate of that year was higher than any rate since World War I. The 1961 rate of 117.3 is slightly below the 1960 rate of 118.0. In recent years the fertility rate for nonwhites has been about 40 births per 1,000 above the rate for whites.

In 1961, about 1,547,000 marriages were performed, an increase of 1.3 percent over the 1960 figure of 1,527,000. Because of concurrent changes in the country's total population, however, the crude marriage rate remained constant for 1959, 1960, and 1961 at 8.5 marriages per 1,000 population.

Divorces were estimated at 391,000 in 1960, compared to 395,000 in 1959. The crude divorce rate was 2.2 per 1,000 population in 1959, 1960 and 1961.

Funds

The total funds available to the Public Health Service in fiscal year 1962 amounted to \$1,633.4 million (see table 1, p. 226). Appropriations and authorizations accounted for about \$1,392.4 million of this amount. The balance was made up of repayments for services given to other agencies and of unobligated balances from previous years.

About 72 percent of the total funds available was allocated to others, in the form of grants to State and local agencies, private institutions, universities, hospitals, and individuals outside the Federal Government. The remainder was used to support the direct responsibilities of the Public Health Service, such as hospital and medical care for legally designated beneficiaries, foreign and interstate quarantine, and Indian health services.

Office of Personnel

At the request of the Surgeon General, the Secretary of the Department of Health, Education, and Welfare appointed an Advisory Committee on Public Health Service Personnel Systems to study the recruitment and retention of personnel. The Committee, headed by former DHEW Secretary Marion B. Folsom, began its study in October 1961 and completed it in March 1962.

In brief, the recommendations of the Committee were: (1) that the Surgeon General personally accept responsibility for the direction of personnel management in the Service; (2) that personnel staff services be reorganized and strengthened; (3) that personnel operations be substantially improved; and (4) that pay and rank be carefully examined and if inadequate, to explore the possibility of legislation that would make them more equitable.

A new Assistant to the Surgeon General for Personnel has been named, and under his direction, the Office of Personnel has begun the implementation of the recommendations of the Committee.

PERSONNEL

At the close of the fiscal year 1962, the Public Health Service had a total staff of 32,638. (See table 2, page 228.) This number includes 4,501 Commissioned Corps Officers, 26,808 full-time and 1,329 part-time Civil Service employees. (See table 3, page 230.) Commissioned Officers on duty included 1,909 members of the Regular Commissioned Corps, 2,366 members of the Reserve Corps on Active duty, and 226 Commissioned Reserve on temporary training duty.

National Center for Health Statistics

The National Center for Health Statistics, nearing the end of its second year in July 1962, has modernized its data processing by installing computer facilities. This has resulted in more timely reporting of Center activities. Another result is far better use of the Center's professional manpower.

When not being used for Center programs, the computer equipment is available to other elements of the Public Health Service, principally in the area of health statistics.

As an experiment, the Center has undertaken negotiation of contracts with statisticians of foreign nations to provide analyses of mortality trends in those countries. This probably will be expanded to bring otherwise unavailable professional resources to bear on the Center's statistical problems.

NATIONAL HEALTH SURVEY

During the year, the National Health Survey accelerated work on its newest data collection program—the Health Records Survey. With help from the Bureau of the Census, a master list of all types of resident institutions and hospitals in the Nation was constructed. This list will be used as a base for sampling studies. Next, pretesting began in the first of a series of surveys based on the master list. This is a survey of Resident Places Providing Nursing or Personal Care, designed to produce up-to-date knowledge of a population known to consist almost entirely of old people.

The National Health Survey Division also operates a program of studies to improve health survey methods. Among these are projects to develop new methods of gathering information on personal health expenditures and to evaluate and refine the collection of data on health insurance coverage in the general population. A third continues the

Health Survey's series of studies to evaluate chronic disease information reported in the Health Interview Survey.

By the end of the fiscal year, full-scale operation of the Health Examination Survey was beginning to be achieved. Data collection on the first cycle, primarily concerned with certain chronic diseases in the adult population, was more than three-fourths completed and work on the pattern of tabulation and analysis of these data was well under way. Meanwhile, plans were being completed for the second cycle, a nationwide probability sample of children from 6 through 11 years of age.

The Health Interview Survey produced reports on several topics not previously reported on by the National Health Survey: (1) Persons receiving care in the home, (2) Proportion of hospital bill paid by insurance, (3) Duration of limitation of activity due to chronic conditions, and (4) Selected impairments by etiology and activity limitation. Estimates for topics discussed in earlier reports were updated with more recent data. Health interview data also served as the basis of a report on the health characteristics of currently employed persons.

NATIONAL VITAL STATISTICS DIVISION

During the year, the Division made substantial progress to reduce the lag between receipt and publication of data from the States. Considerable mortality and natality statistics for the 1961 data year were released well before the end of 1962.

In fiscal year 1962 the Division published annual and provisional monthly data in vital statistics and six special studies: (1) Occupational mortality, (2) Number and type of medical care institutions, (3) Matching birth certificates and census information, (4) Characteristics of Georgia marriages, (5) Improving national divorce statistics, and (6) Standard error of age-adjusted death rates.

The Division undertook its largest single reimbursable project to date, involving more than \$300,000, to provide technical assistance for a series of monographs sponsored by the American Public Health Association to synthesize data of concern to public health and demography drawn from a wide array of sources.

The Division's computer programmer staff, built entirely during the year, is largely complete and trained. The Division and other Center components are developing ideas to use the computer facilities to strengthen vital statistics programs in the States.

The ninth national meeting of the biennial Public Health Conference on Records and Statistics in June 1962 was singularly successful in improving vital and health statistics and making them more useful and usable.

The Division is in the second year of the national mortality sample survey, based on a sample of deaths occurring throughout the country. Plans have been developed to begin a continuing national natality sample early in 1963. The third phase of a cystic fibrosis study is nearing completion.

For the 1960 census year, marriage and divorce statistics were based on nationwide samples of marriage and divorce records collected from States and local areas. For 1961 and 1962, the samples are being collected only from the registration areas, which at the end of the fiscal year contained 35 States and 4 other areas for marriages and 21 States and 1 other area for divorces.

The Division stimulated discussion and provided technical and consultative advice as required on the need for retaining the item on race-color on vital records, beginning with a panel discussion at the annual meeting of the American Public Health Association.

Efforts have been intensified, cooperating with State and Federal agencies, to develop minimum safeguards to reduce fraud associated with vital records and promote the integrity of vital records. A draft of measures to be applied was written.

OFFICE OF ELECTRONIC SYSTEMS

During the year, the Office of Electronic Systems completed installation of computer equipment—and IBM 1401 and the more powerful 1410 system. Conversion of data processing from mechanical equipment and from rented electronic equipment is proceeding on schedule.

OFFICE OF HEALTH STATISTICS ANALYSIS

This Office made some progress in staff recruiting and training. A start was made in the development of an index of health. The Office continued its study of changes in the general mortality trend as well as the infant mortality trend in the United States. Contracts have been negotiated in several countries for study to determine, if possible, the factor or factors responsible for the change in mortality trends in various parts of the world. This approach significantly increases the professional resources the Office can bring to bear on the problem.

National Library of Medicine

The new building in Bethesda, occupied April 16, 1962, affords the National Library of Medicine an excellent facility for the implementation of its computer-based bibliographic system termed MEDLARS. To become fully operational about September 1963, the new system will offer the capability of providing very detailed and specialized reference services, and enlarge, improve, and speed the preparation

of *Index Medicus*. The preliminary design phase of the MEDLARS project was completed in December 1961. Work is progressing on the second phase covering detailed system design, equipment and facility specifications, site preparation, personnel training, and computer programs. Plans are to negotiate a contract for the final (implementation phase) in September 1962.

BOARD OF REGENTS

The Board of Regents held two meetings, on December 14, 1961, and on April 13, 1962. Building problems, moving problems, budget problems, the progress of MEDLARS, and the progress of the Extramural Program occupied the major part of the Board's attention. Drs. Norman Q. Brill, Harve J. Carlson, and Saul Jarcho joined the Board in the fall. Dr. Worth B. Daniels served as Chairman of the Board during the year, and was succeeded in April by Dr. Warner L. Wells.

SCIENCE TRANSLATION PROGRAM

On July 1, 1961, the Russian Scientific Translation Program was transferred from the National Institutes of Health to the National Library of Medicine. This change presented a new challenge to the Library and the opportunity to coordinate and improve international medical communication activities. The objective of the Science Translation Program is to communicate the results of high-quality medical research published in languages unfamiliar to American medical scientists. This program has supported the cover-to-cover translation of nine Soviet research journals, the comprehensive abstracting of Soviet research publications, and the preparation and publication of critical review papers. As a result of an extensive program evaluation begun early in 1962, the program has undergone some modification, stressing the coverage of such literature by abstracts and critical reviews. While full attention will be paid to Soviet contributions, the program will support translation and other communication activities from such languages as Japanese, where the quality of research is high. These activities will be closely coordinated with the Public Law 480 translation program conducted by the Library, and with similar programs conducted by the National Science Foundation.

PROGRAM STATISTICS

In fiscal year 1962 the Library acquired 11,338 books, 63,959 serial pieces, and added 739 new serial titles, increasing its collections to 1,084,256 items. The History of Medicine collection was increased by 147 old and rare items. The staff cataloged 17,257 titles, and 471 pictures were added to the art collection. There were 161,090 volumes circulated, and 10,242 reference questions answered. Main entries

published in the *National Library of Medicine Catalog* totaled 20,260. The *Index Medicus* published 141,911 items from 2,132 journal titles. Interlibrary loans increased to 113,485. Microfilm production amounted to 2,840,400 pages of which 570,662 pages were for preservation purposes and 2,243,862 pages for interlibrary loan.

Division of Public Health Methods

The Division of Public Health Methods conducts studies to identify emerging national health problems and to assess the significance of social, scientific, economic, and educational developments to health services and resources. In these areas, the Division provides advisory and consultative services within the Service, to other governmental agencies, and to national professional and voluntary agencies. Division responsibilities involve it also in planning, policy coordination, and program development and analysis within the Service. Finally, the Division provides technical assistance, clearance, and reference services on legislative matters other than appropriations; coordinates and analyzes plans of the several Service programs for substantive survey projects; and performs additional staff services in support of the Surgeon General and the Service as they are required.

ORGANIZATIONAL CHANGES

During the year, staff and resources engaged in studies and other activities in the general area of health economics were transferred to the Bureau of State Services to become part of the newly created Division of Community Health Services. The Division of Public Health Methods acquired from the Bureau of State Services the responsibility for providing staff services in support of the Surgeon General's annual conferences with State and Territorial health authorities.

Responsibility for editing and publishing *Public Health Reports*, the Service's official journal in public health practice and administration, was transferred to the Office of Information, Office of the Surgeon General. The Clearinghouse on Morbidity Projects, which puts out annual listings of current morbidity studies, was moved to the Division of Community Health Services, Bureau of State Services.

PROFESSIONAL EDUCATION

"Education for Practical Nursing, 1960," published during the year, reports the findings of the first nationwide study of practical nurse training programs. The study was conducted in cooperation with the National League for Nursing.

Data acquired from two questionnaires sent to all State-approved programs revealed great variation among them in number of students

admitted, size of affiliating hospital, curriculum length and content, types of nursing experience, faculty size and qualifications, and costs. Study findings for practical nurse training as a whole include the following: State-approved training programs increased from 150 in 1950 to 662 in 1960, a decade in which yearly graduates from practical nurse programs rose from 3,000 to more than 16,000. Of the 23,000 students admitted to training programs in the 1959-60 school year, more than two-thirds were high school graduates. One-third of these entering students were less than 20 years old. Most training programs are a year in length, and all provide for clinical experience in hospitals.

In response to a request from the Bureau of the Budget, the Division made a study of Federal support of schools of public health. Scheduled for publication in *Public Health Reports*, the report shows the amount and nature of Federal assistance in 1961 to the 11 schools of public health then in full operation and presents additional data concerning the schools' enrollment, expenditures, and other sources of funds. Federal interest in higher education and the several methods currently used for providing Federal support are also discussed.

HEALTH MANPOWER

During the year, two publications were added to the Health Manpower Source Book series:

Section 12, "Medical and Psychiatric Social Workers," analyzes employment characteristics, levels of education, and annual salaries for the estimated 11,700 of these workers employed full-time in 1960. Findings with respect to professional training showed the proportion of workers with 2 or more years of graduate education in a school of social work to be generally higher for psychiatric than for medical social workers, for those in health programs rather than programs pointed at other objectives, for employees of National rather than State or local agencies, and for those in supervisory or consultative rather than direct-service positions.

"Hospital House Staffs," section 13 in the source book series, presents data for 1940-60 on internships and residencies in U.S. hospitals. The number of these positions offered, the number filled, and the number filled by graduates of foreign medical schools are related to the control, size, and geographic location of hospitals. The marked increase in house staff positions and the hospitals' growing dependence on foreign medical graduates to fill them are indicated by the facts: throughout the 'fifties more than 10 percent of all positions offered went unfilled, while the proportion of filled positions accounted for by foreign house staff was rising from 10 percent in 1951 to 25 percent in 1960.

A summary of trends since 1900 and current statistics indicating the Nation's total health manpower resources, the numbers of workers in the major health manpower categories, and the general health status of the population, was published under the title, "Chart Book on Health Status and Health Manpower."

Several shorter manpower studies were completed for publication. The latest report in a series on trends in medical practice appeared in the *Journal of Medical Education*, November 1961. It reports changes in the professional careers of physicians shown in a recent resurvey of 1935, 1940, and 1945 medical graduates. A second study, on osteopathic college alumni, was published in the May 1962 issue of the *Journal of the American Osteopathic Association*. Another, presenting physician-population projections from 1961 through 1975 is scheduled for publication in the *American Journal of Public Health*.

Other projects underway include a nationwide study of the number, distribution, and characteristics of pharmacists, and an extensive study of medical specialists which will show age, sex, race, State location, medical school attended, membership in specialty societies, and type of practice for some 26 specialties.

Division of International Health

During the year, the Division arranged for official United States representation and members served on delegations to the 15th World Health Assembly in Geneva, Switzerland, in May 1962, the 28th and 29th Sessions of the Executive Board of the World Health Organization also in Geneva, the 13th Meeting of the Directing Council of the Pan American Health Organization in Washington in October 1961, the 44th and 45th Meetings of the Pan American Health Organizations' Executive Committee in Washington in October 1961 and April 1962, and the 12th Session of the Western Pacific Regional Committee of the World Health Organization which was held in Wellington, New Zealand in September 1961. In addition a member of the Division served as Alternate Commissioner to the Regular Annual Session of the South Pacific Commission in October 1961. This meeting was held in Noumea, New Caledonia.

Official U.S. policies on topics discussed at these meetings were developed by the Division in consultation with the Department of State and the technical areas of the Public Health Service. The Division also participated in the development of policy on health related matters which came before meetings of the Food and Agricultural Organization, the United Nations Childrens Fund, the International Labor Organization, the Social Commission of the United Nations, and the South Pacific Commission.

The Division assisted in the appointment of more than 300 U.S. experts to serve as members of the WHO Expert Advisory Panels or as short-term consultants to the World Health Organization, or the Pan American Health Organization; and continued the assignment of 73 officers to the Headquarters' Staff and overseas missions of the Agency of International Development.

Twenty-seven Public Health Service officers were detailed to staff the medical organization of the Peace Corps. These officers are principally responsible for the health of Peace Corps volunteers. In addition they supply such local health service as time will permit on a volunteer basis.

The International Education and Training Branch of the Bureau of State Services was transferred to the Division of International Health and provided program and guidance services to 623 new visitors and students from 92 countries.

Arrangements were made under U.S.-U.S.S.R. agreements negotiated by the Division for the exchange of four scientific missions in FY 1962. These were in the fields of medical ecology, neurophysiology and pathology, virology and thoracic surgery. The latest agreement, concluded early in 1962, calls for the exchange of nine missions in calendar years 1962 and 1963. The agreement also calls for the exchange of up to 25 individual scientists from each country and the convening of joint meetings on specific subjects, including cancer, rheumatic diseases and virology.

The Health Studies Program of the Division was combined with the International Survey activities of the Department, and the staff was transferred to the Office of the Secretary of HEW. The Division continues to provide the reference and research facilities for the program.

Division of Health Mobilization

The authority and scope of the health mobilization program were considerably increased during the past year through the issuance of two Executive orders which assigned to the Department of Health, Education, and Welfare full responsibility for (a) the development of requirements, plans, and operating procedures regarding the Nation's Emergency Medical Stockpile; (b) the preparation of national emergency plans and the development of preparedness programs covering health services, civilian health manpower, health resources, and educational programs.

Prior to these orders, management of the emergency medical stockpile and coordination of the health mobilization activities had been carried on under the program direction and policy control of the Office of Civil and Defense Mobilization.

During the year, major program emphasis was concentrated in three areas:

1. Preparation of the civilian to meet his own health needs when deprived of the services of a physician.

The medical self-help training course developed in cooperation with the American Medical Association and endorsed by all major governmental and private health organizations was introduced to the general population. Five thousand training kits containing film strips, projector, instructors' lesson plans, student handbooks, and a resource manual, *Family Guide—Emergency Health Care*, were allocated to the respective States. All instruction is being conducted on a volunteer basis with training of one person in each family set as an ultimate goal.

2. Assistance to States and local communities to ensure an operational capability to care for civilian health needs in an emergency.

Effective preparedness depends on having sufficient quantities of medical and surgical supplies and hospital facilities for use where they are needed; and on having predesignated personnel organized and trained to act in a disaster situation and utilize supplies and facilities in the most efficient, prudent manner possible.

The contents and condition of the nearly \$200 million civil defense medical stockpile were reviewed and plans coordinated for its incorporation into community survival efforts. Expansion was begun to increase the supplies of the 1,930 200-bed civil defense emergency hospitals (CDEH's) stored throughout the United States to a 30-day capability from the former 3- to 4-day potential, and arrangements were made for the procurement, assembly, and distribution of an additional 750 hospitals.

Physicians and members of the allied health professions were given training in the health aspects of civil defense, setup and utilization of CDEH's, and in expanded functions whereby the allied health professions can relieve physicians by performing additional duties in an emergency.

3. Development of a coordinated emergency program for Federal agencies having health or health-related responsibilities.

Basic policy on the objectives, organization, functions and administration of the headquarters and regional Emergency Health Service structure was developed and issued in coordination with other agencies, and policy formulation begun for each field facility.

To answer a need of community civil defense health planners, a guide is being prepared to give detailed advice on developing a community emergency health service plan and organization and putting

them into operation. The guide will serve as a standard of comparison for evaluating and improving community emergency health service plans and organizations already in existence, and for creating new ones where there is a need.

Bureau of Medical Services

The Bureau of Medical Services operates hospitals, clinics, health centers, and other health services in 256 full-time and 429 part-time locations, in this country and abroad, on land and on the sea, at major ports and on remote inland reservations. Some 13,000 staff members are engaged in these activities of the Public Health Service that provide direct health care to many people and help to safeguard the Nation's strength.

Medical and hospital care is provided for American seamen. International travelers arriving from foreign points are checked against any possibility of contagious disease. American Indians and natives of Alaska are given comprehensive health care because they are not yet ready to provide it for themselves. Protection of the health of the men of the Coast Guard and the Coast and Geodetic Survey, and the cadets at the Coast Guard and Merchant Marine academies, is a responsibility of the Bureau.

Members and retired members of the armed forces and their families receive care at hospitals and clinics of the Bureau where more convenient than military hospitals; in turn, Public Health Service commissioned officers may receive care in military facilities.

A special hospital is devoted to treatment of leprosy. Treatment for narcotic addiction is given in two neuropsychiatric hospitals. The Bureau is responsible for medical and hospital care in all the Federal prisons and correctional institutions throughout the country.

Medical and hospital care for civilian employees of the Government who are injured on duty or become ill from causes related to their work is administered by the personnel of the Bureau. In another program, health units are operated for a number of Federal departments and agencies that have asked for this help in protecting their employees' health.

The Bureau of Medical Services conducts clinical research and carries on training programs for medical and health personnel.

The Bureau is guided by recommendations of the BMS Advisory Committee on Hospitals and Clinics, and the Indian Health Advisory Committee, made up of experts from hospitals and health programs all over the country.

Division of Hospitals

The mission of the Division of Hospitals is primarily the operation of a medical care program for American seamen and other groups designated by Congress. In addition to seamen, patients include Coast Guardsmen and their dependents, uniformed service members of the Army, Navy, Air Force, Public Health Service, and Coast and Geodetic Survey and their dependents, civil service employees injured in line of duty, persons with leprosy, narcotic drug addicts, and several other groups.

It maintains working relationships with other components of the Public Health Service, constituent agencies of the Department of Health, Education, and Welfare, other Government programs, and public and private organizations that relate to the work of the Division.

The Division contributes to the fulfillment of the Nation's needs for scientific and technical manpower and for improved health care by training physicians, dentists, and paramedical personnel in its hospitals, by conducting clinical research, and by providing medical care to a substantial segment of the population, including persons having leprosy and those addicted to narcotic drugs.

A problem yet to be resolved which is felt nationwide but particularly in the larger cities is the need for post-hospital treatment and follow-up services at the local level for narcotic addicts.

VOLUME OF PATIENT CARE

Utilization of the 15 hospitals operated by the Division in fiscal 1962 exceeded that of the previous year. Admissions during 1962 totaled 51,251—an increase of 3.4 percent over 1961. In addition, 948 babies were born. The average daily inpatient census rose 1.4 percent to 4,801. Total outpatient visits increased 6.9 percent, to reach 1,277,965.

Department of Defense uniformed service personnel and their dependents accounted for 33 percent of all admissions, 14 percent of the total average daily patient load, and 39 percent of all outpatient visits to PHS hospitals and outpatient clinics.

COOPERATION REGARDING NARCOTIC PROBLEMS

Thirteen Federal officials, representing the Interdepartmental Committee on Narcotics, met at the Lexington PHS Hospital in June 1962 to become familiar with its operations and the program for the care of narcotic addicts. An Assistant Secretary of the Treasury headed the group. Members of the committee represented the White House, the Department of State, Justice, and Defense, the Public Health Service, the Bureau of Narcotics, and the Bureau of Customs.

Three narcotic control officers from Thailand spent 3 days at the Lexington PHS Hospital observing its program for treating narcotic addict patients. Members of the National Narcotic Enforcement Officers Association, Inc., visited Lexington for orientation to the hospital's program for medical care and vocational rehabilitation of narcotic addicts. The association has a membership of 80 Federal, State, and municipal enforcement officers.

RESEARCH

In cooperation with the National Cancer Institute, NIH, a collaborative cancer research program is being developed in Public Health Service hospitals. Initial plans primarily concern cancer chemotherapy and involve the PHS hospitals at Baltimore and Boston.

The San Francisco PHS Hospital and the Division of Chronic Diseases, BSS, are conducting joint research projects in heart disease control.

A new program is underway for the early detection of oral cancer among patients in PHS hospitals and outpatient clinics. A pilot study is planned in the Staten Island, San Francisco, and Baltimore PHS hospitals and in the clinics in Washington, D.C., and Pittsburgh.

A preventive medicine clinic was established in 1962 at the Boston PHS Hospital, in collaboration with the Division of Chronic Diseases, BSS. The new project aims to study and define the role of the hospital in the field of preventive medicine and public health. Intensive examination of outpatients from the hospital's regular outpatient population is conducted. Patients with detected disease entities are referred to the appropriate inpatient or outpatient service for definitive therapy. The coordinator of preventive medicine activities also stimulates the interest of the hospital staff in public health practices and methods and coordinates existing practices from the standpoint of preventive medicine.

Twenty-one research projects were completed in the Division's research program in fiscal year 1962.

PROFESSIONAL TRAINING

Ninety medical interns completed formal training in the hospitals in 1962. Of these, 59 remained in the Public Health Service.

Forty residents completed formal training in the following categories: anesthesiology, 2; dermatology, 1; general practice, 7; internal medicine, 9; obstetrics-gynecology, 1; ophthalmology, 3; pathology, 1; psychiatry, 3; radiology, 4; surgery, 8; urology, 1.

Two medical officers completed 1-year residency training in otolaryngology. Two specialists completed 2 years of training in research methodology.

Plans were completed for the addition of full pediatric services at the Baltimore and Seattle hospitals.

GOALS FOR FUTURE

Goals of the Division include: improved physical facilities and equipment to enable the hospitals and clinics to provide medical care of a quality equal to that available in non-Government facilities; improvement of medical care for an increasing number of patients; continuation of present research programs and expansion of research; continuation and increase of staff participation in teaching programs at medical and dental schools; expansion of approved residency training programs in the hospitals.

FEDERAL EMPLOYEE HEALTH PROGRAM

Health protection for Federal employees was recognized as a responsibility of management in 1914 when the Treasury Department established a "relief room" in its main building. Today there has evolved an employee health service, sanctioned by Congress, which authorizes preventive health programs, with professional responsibility for the programs vested in a physician in charge. On a reimbursable basis, the Federal Employee Health Program operates health units for Federal agencies requesting this service which serve as patterns of this type of health service.

In 1962 two new health units were added, bringing the total to 39 serving more than 60,000 employees.

Employee health maintenance examinations for personnel 40 years of age and older totaled 3,789. Immunizations were given as follows: influenza, 32,322; poliomyelitis, 12,017; smallpox, 2,129; tetanus, 32,147. Screening tests given were: diabetes, 9,342; glaucoma, 728; visual acuity, 2,553.

More than a quarter of a million visits were made to the health units. About 1 of every 5 visits was for some service prescribed by a private physician or dentist; 1 of every 15 visits resulted in a referral to a private physician.

FREEDMEN'S HOSPITAL

Freedmen's Hospital, Washington, D.C., provided care for 14,218 patients. The average daily census of 375 was the same as in 1961. The average length of stay for the 14,211 discharged patients was 9.8 days. There were 3,199 live births.

Outpatient visits in 1962 totaled 96,267, a slight increase over 1961.

Inadequacies of the hospital's physical facilities caused numerous operating problems in caring for these patients. Excessive crowding frequently occurred in the medical, obstetrical, and newborn serv-

ices. Renovations were undertaken on the third floor of the annex to allow the addition of 50 beds for medical and surgical patients.

The attending and consulting staff of physicians and dentists totaled 217, an increase of 4; the courtesy staff consisted of 114.

All training accreditations of the hospital were maintained. The hospital serves as the clinical teaching facility for junior and senior students of Howard University's College of Medicine. The hospital also offers approved medical, dental, pharmaceutical, and dietetic internships and residency training in 14 medical specialties and in hospital administration. It has a school of nursing and a school of X-ray technology.

The 50 available residency appointments at Freedmen's Hospital were filled in 1962; among the residents were 20 graduates of foreign medical schools. There were also 22 medical interns, 2 dental interns, 2 pharmaceutical interns, 10 dietetic interns, 11 research fellows, and 1 administrative resident.

The school of nursing graduated 35 student nurses, raising the total of the school's graduates to 1,480.

The school of X-ray technology continued efforts toward improving curriculum, clinical practice, and other activities. The six 1962 graduates of this 2-year course brought the total to 56.

More than 32 clinical research projects were in progress during the year. Sixty or more scientific articles by staff members were published or were in press.

Legislation authorizing the transfer of Freedmen's Hospital to Howard University was approved by the 87th Congress on September 21, 1961. The actual transfer date had not been established as of the close of the 1962 fiscal year.

Foreign Quarantine

For the 15th successive year the Nation was free from quarantinable diseases known to have been introduced from abroad.

Quarantinable diseases were introduced into some countries that had been free of such infection, and there was a resurgence of these diseases in some endemic areas of the world. The Division of Foreign Quarantine faces an increasingly significant challenge in preventing the importation of quarantinable diseases. In 10 years there has been an increase of nearly 300 percent in the annual number of quarantine inspections of persons arriving in this country by air.

Special vigilance was maintained at U.S. quarantine stations during the year on the basis of outbreaks of quarantinable disease. By direct efforts and through cooperation of State and local health departments and other organizations, the Division took action to raise the immunity level of the traveling public, of persons employed in

port areas and adjacent communities, and of persons throughout the Nation who meet or treat the sick.

QUARANTINABLE DISEASES

There were five separate importations of smallpox into England and Wales, all from South Asia. These resulted in 69 additional cases with 24 deaths. One of the imported cases and one secondary case were not recognized as smallpox until resultant cases and deaths had been diagnosed.

There were two smallpox importations into Germany, one from Africa, the other from South Asia.

Several smallpox cases were detected on ships. The most significant instance occurred at Nowy Port, Poland, where one crew member of the S.S. *Indian Resolve* was found to have the disease. There were 70 secondary cases in crew members, and cases were confirmed in a quarantine officer and three Polish guards.

There was a resurgence of smallpox in Ceylon. The disease is endemic in Brazil, Ecuador, and parts of Africa and Asia.

The magnitude of the spread of cholera to areas of eastern Asia cannot be estimated. More than 7,000 cases were reported in the Philippines, where the presence of the disease posed a threat to other nations—especially danger of importation by small fishing craft into other Pacific islands.

Sporadic cases of yellow fever continued to be reported from endemic areas of South America and Africa.

Plague cases occurred sporadically in old endemic foci, with two major outbreaks—in Kolar District, India, and in Ecuador, including the port of Manta. Two cases of plague were reported in the United States in persons who had been in contact with wild rodents or their ectoparasites in areas of New Mexico of no importance to international traffic.

Typhus (louse-borne) continued to be present at a low endemic level in some areas of Mexico, Ecuador, and Peru and in Yugoslavia and the United Arab Republic. Typhus and relapsing fever are a major problem in Ethiopia, where more than 2,000 cases of each disease were reported in calendar year 1961.

INTERNATIONAL TRAFFIC

In the United States, the number of inspections of aircraft for quarantine or immigration-medical purposes was about the same as in 1961—over 65,000. There was an increase of 12.9 percent in quarantine inspections of persons arriving by plane—from 2,417,238 to 2,728,253. Inspections of ships increased from 32,105 to 32,980 and inspections of persons arriving by ship increased from 1,966,580 to 1,985,318.

Persons subject to quarantine inspection arriving in the United States by all modes of travel, including land entry from the interior of Mexico, increased from 5,607,218 in 1961 to 6,112,332 in 1962. It was necessary to detain 65 persons in isolation, compared with 11 in 1961. The number of persons who were allowed to continue to their destinations in the United States, but placed under medical surveillance, was 328,928 compared with 91,985 in 1961.

MEDICAL EXAMINATIONS

Establishment of Fee

A fee of \$10 was established for visa medical examinations performed by the Division of Foreign Quarantine, effective December 1, 1961. Fee collections will repay the Government for cost of the visa examination activities of the Division of Foreign Quarantine.

General Program

The number of alien applicants for visas who were examined by medical officers abroad increased 2.2 percent, from 185,142 in 1961 to 189,192 in 1962. Of these, 97 percent were immigrants. There were 1,765 who were found to have diseases or conditions excludable under immigration law. Aliens examined on arrival at U.S. ports increased 5.2 percent, from 3,132,313 to 3,295,999. There were 3,049 found to have excludable diseases or defects; 18 percent of these had been so diagnosed abroad, but were admitted under special provisions of immigration law.

Staff in Europe examined 6,552 refugee-escapees under Public Law 86-648, and 111 were found to have excludable conditions. Some with excludable conditions were admitted to the United States by the Immigration Service subject to necessary controls.

Special arrangements were made for medical examination of Chinese refugees leaving Hong Kong for the United States.

Immigration of Tuberculous Aliens

The Division arranged for health controls for certain immigrants with tuberculosis whose entry is authorized by amendment to the Immigration and Nationality Act effective September 26, 1961. The immigrants must be members of the immediate family of a U.S. citizen, of a resident alien, or of an alien who has been issued an immigrant visa. Health control provisions contain improvements over those enforced under a similar, temporary law that applied to tuberculous aliens receiving visas before July 1, 1961.

The U.S. quarantine service placed 800 arriving aliens under health controls for tuberculosis in 1962, compared with 929 in 1961.

Additional Change in Immigration Law

Amendment to the Immigration and Nationality Act also provided that "leprosy" and "tuberculosis in any form" are no longer specified within the act itself as conditions excluding aliens from admission to the United States. Leprosy and tuberculosis are now designated in Public Health Service regulations as "dangerous contagious diseases," which are excludable under the act. Coverage of these two diseases by regulations allows more flexibility of terminology and procedures, in line with current medical concepts.

Migratory Farm Labor

In the program of recruiting farm workers from Mexico, 292,087 laborers were examined, with 4,533 rejections, at 3 centers in Mexico. At 5 border reception centers in the United States 310,247 examinations were made, with 5,519 rejections. At the reception centers 287,672 serologic tests for syphilis were made, with 13,267 positive reactors. The rate of positive reactors decreased from 52 per 1,000 men tested in 1961 to 46 per 1,000 in 1962. Treatment is given to positive cases, and they are admitted to the country.

ENTOMOLOGY AND SANITATION PROGRAMS

The program for control of the yellow fever mosquito, *Aedes aegypti*, was carried on in more than 100 international traffic areas within the yellow fever receptive zone in southern United States and insular possessions. The infestation index was kept at zero in 88 of these areas and at a relatively low level in the rest.

Inspections of aircraft arriving from foreign countries revealed the presence of more than 21,000 insects, including many of medical importance. There were 53 species of mosquitoes, 15 of which do not occur in this country.

The Division's entomologist in Honolulu discovered the presence of two species of mosquitoes new to Hawaii and Guam, respectively. *Aedes vexans nocturnus*, suspected in the transmission of Japanese-B encephalitis, was detected in Hawaii. *Culex tritaeniorhynchus*, the principal vector of Japanese-B encephalitis, was discovered in Guam.

Only a small percentage of ships entering United States ports showed evidence of appreciable numbers of rats.

The sanitation program has resulted in considerable improvements on many ships.

OTHER QUARANTINE ACTIVITIES

An improved surveillance method was adopted for use in placing arriving international travelers under control by local health officers.

The U.S. Armed Services jointly issued revised quarantine regula-

tions affording stronger defenses against disease importation, in accord with suggestions from the Division of Foreign Quarantine.

At El Paso, Tex., procedure was initiated that permits certain private aircraft to enter from northern Mexico without inspection by a Public Health Service quarantine officer, provided the pilot completes a health certification form in the presence of a customs officer. A quarantine officer must be called in if any health problem arises. Extension of the procedure to private aircraft throughout the entire border area can help provide protection where coverage of all traffic by each Government inspection agency would present tremendous practical problems.

The International Certificates of Vaccination against smallpox, cholera, and yellow fever were included in a booklet form published by the Division.

Health Services for Indians and Alaska Natives

More than 380,000 American Indians and Alaska Natives (Aleuts, Indians, and Eskimos) look to the Indian health program for preventive and curative medical service. The purpose of the Division of Indian Health is to provide this care to Indians and Alaska Natives where they are and when they need it, and to raise the level of health to that of the general population.

MEDICAL FACILITIES

In 1962, the Division operated 24 health centers, 17 school health centers, and several hundred field stations, 50 hospitals (seven in Alaska) with 3,280 beds, and had contract arrangements with 200 other hospitals with 1,000 beds. There were 18 contracts with State and local health departments for public health services. Physicians and dentists in private practice furnished medical and dental care on a contract basis. A new 34-bed hospital was opened at Keams Canyon, Ariz. A new 50-bed hospital was opened at Kotzebue, Alaska—150 miles across the Bering Strait from the Soviet Union.

The Kotzebue Hospital serves 7,500 natives, mostly Eskimos, from an area of 68,000 square miles and 28 scattered villages. There are no roads leading into Kotzebue. Transportation is by plane, dogsled, or boat.

Additions to hospitals at Cass Lake, Minn., and Fort Defiance, Ariz., were completed. Health stations were constructed at Ponemah, Minn., Pryor, Mont., and La Plant, Wakpala, and Norris, S. Dak.

HEALTH RESULTS

Illustrative of the advances that have been made since the program was transferred to the Public Health Service in 1955 is the decline in

the numbers of new cases and of deaths due to tuberculosis, a continuous downward trend since a peak in 1956.

The downward trend results partially from the new drugs and other measures being used successfully in controlling tuberculosis during the last few years. Of equal importance is the substantial improvement in the quality and scope of health services provided. For example, there has been an increase in outpatient treatment and in case finding.

Even with the advances in the last 7 years, the average age at death is 41 for an Indian and 30 for an Alaska Native as compared to 62 for the general population. The tuberculosis rate is still $4\frac{1}{2}$ times greater among Indians and seven times greater among Alaska Natives than among the general population.

The infant mortality rate has declined 40 percent since 1954 but is still three times greater than that of the total population.

Despite the high prevalence of influenza, pneumonia, tuberculosis, and gastroenteritis, accidents are the leading cause of death. The rate of deaths due to accidents is three times higher among Indians and four times higher among Alaska Natives than in the total population. Accident prevention campaigns are under way.

The second most common cause of death is heart disease. Degenerative diseases are less frequent than in the general population, because half of the Indians are under 20 years of age.

PROFESSIONAL STAFF

Improvements have been made in correcting critical staffing deficiencies. Additional health workers—including physicians, dentists, sanitary engineers, sanitarians and sanitarian aides, pharmacists, public health nurses, trained practical nurses, dental assistants, social workers, medical record librarians, nutritionists, dietitians, and health education workers—have been added to the field staff.

The full-time staff now numbers about 5,000 with less than 150 in Washington. More than half of the staff is of Indian descent.

HEALTH EDUCATION

The goal of health education activities is to bring to the Indian people a better understanding of the fundamentals of good health, and to create within them a desire to assume responsibility for taking the necessary steps to improve their health.

That a measurable degree of success is being achieved is indicated by the increasing cooperation of Indians in program activities—immunization, for example—and by the growing number of Indians who participate directly in program planning.

In 1962 the health education staff numbered 41, most of whom were Indians with college training in education, anthropology, or sociology.

THERAPEUTIC SERVICES

The more than 81,000 admissions to Indian hospitals in 1962 reflected a changing pattern in Indian health. There were fewer tuberculosis patients, and their hospitalization periods were shorter. This meant more facilities were available for the practice of preventive medicine.

In 1962, the number of therapeutic services to outpatients and preventive health services continued to increase. At the hospitals, 674,000 outpatients visits were recorded in 1962—an increase of 7 percent over 1961. More than 400,000 visits for medical services were made to health centers, stations, and other clinic locations.

There was a 6 percent increase in hospital nursing and a 5 percent increase in field nursing. The professional competence of nursing staff was upgraded through advanced training in nursing services administration and in maternal and child health. Additional training in pediatrics, obstetrics, medical surgical nursing, operating room nursing, and central supply techniques was provided for practical nurses.

In Alaska, the number of clinics held in villages increased. Almost 100 villages were reached by doctor, nurse, or technician.

Three additional hospitals were staffed with pharmacists in 1962, so that 89 percent of patients and 81 percent of those coming for outpatient care received medical care at hospitals with pharmacists. During the year 627,000 prescriptions were dispensed to 510,000 outpatients, an increase of 23 percent. The 175 health facilities which did not have pharmacists (schools, small hospitals, health centers, health stations and locations) received drugs and pharmacy services from hospitals with pharmacists.

Many Indians living on reservations are almost untouched by present-day views of nutrition. Often their food customs have been handed down from generation to generation. In some instances their food resources are scarce. Thus education, in-service training, and cooperative research were important in the work of the nutrition and dietetics staff in 1962.

Nutrition education and training materials were developed. Studies of nutritional status and dietary practice were conducted on two Montana reservations, in cooperation with the Interdepartmental Committee on Nutrition for National Defense. A 3-year nutritional study in Indian boarding schools in North Dakota and South

Dakota was completed. A diabetes study among Oklahoma Indians was begun, in cooperation with the Division of Chronic Diseases, Bureau of State Services.

Medical record librarians were added to the staffs of the hospitals in Gallup, N. Mex., Fort Defiance, Ariz., and Tuba City, Ariz. The goal is to provide a librarian for every hospital of 50 beds or more. For smaller hospitals, young Indians will be trained as medical record technicians.

MATERNAL AND CHILD CARE

An increasingly successful part of the Division's work in maternal and child care has been in bringing to Indian mothers a perception of health practices that is in accordance with modern medicine. Eighty-eight percent of Indian mothers now give birth to their babies in hospitals, and there is greater acceptance of prenatal care.

Infant mortality has declined 30 percent in the past 7 years but the death rate between the ages of 28 days and 11 months remains high. Principal causes of these deaths are diarrhea and respiratory diseases. Therefore, efforts have been increased to educate mother and family in good health habits, and to inform them of the availability of health facilities and the importance of early care for sick children. Significant reduction in infant mortality will be realized only as economic status, housing, sanitation, and living conditions in general are improved.

Consultants and physicians with special training in maternal and child health have been added to the staff. Specialized training in many phases of maternal and child care has been provided.

Rehabilitation of handicapped children received increased attention.

TUBERCULOSIS

Tuberculosis, once the leading cause of death among Indians, has dropped to eighth place. The number of Indians entering hospitals with tuberculosis, the length of their stay, and the rate of new cases reported have declined, but in some areas tuberculosis is still several times more frequent than in the general population.

In 1962 the daily tuberculosis census in the hospitals was approximately 24 percent of the total daily census—a reduction of approximately 58 percent in 7 years.

The decline in the death rate in the last 7 years has been 48 percent among Indians and 83 percent among Alaska natives.

DENTAL HEALTH

Emphasis on preventive dental care was increased in 1962. Fluoridation equipment was provided at Mount Edgecumbe, Alaska, and

Metlakatla, Alaska, and on the Menominee Reservation in Wisconsin, and a program was begun for the use of dietary fluorides where water fluoridation is not feasible or adequate.

There were 203,000 dental visits during the year; 95,500 patients were examined and 85,000 received dental services. This means that approximately 25 percent of the 380,000 Indians and Alaska natives were examined and they received about 54 percent of the care needed.

A periodontal program was instituted by a trained periodontist. A total of 33 dental officers and 19 auxiliary dental workers received some type of training. Twenty-four women, Indians and Alaska natives, were trained as dental assistants.

New mobile dental units were placed in service in the Aberdeen and Albuquerque areas.

ENVIRONMENTAL SANITATION

Environmental sanitation is a basic problem. Water supplies are often polluted and inadequate for domestic use, and frequently must be hauled for great distances. Waste disposal is often primitive.

Under Public Law 86-121, enacted in 1959, the Public Health Service was given authority to work with the Indians and Alaska natives in construction of sanitation facilities for their homes and communities.

The work is handled on an individual project basis. Participation of Indians and Alaska natives in the project construction and their assumption of responsibility for operation and maintenance of completed facilities are essential elements of the activity.

In 1962, there were 57 projects authorized, on 30 Indian reservations and in 6 Alaska native villages and 6 Indian communities, to serve 4,800 homes and 24,000 persons. Funds appropriated aggregated \$3 million.

TRAINING FOR INDIANS AND ALASKA NATIVES

More than half the employees of the Division are of Indian heritage. Formal courses and in-service training are provided for them and for Alaska natives in almost every phase of the Indian health program.

Fifty-eight young women were trained as practical nurses in the Public Health Service school of practical nursing in Albuquerque. For the first time, practical nurses were given additional training to assist public health field nurses.

Courses for sanitation aides, dental assistants, community health workers, and food service supervisors were given at many locations.

CONSTRUCTION ACTIVITIES

A new 36-bed hospital at San Carlos, Ariz., was to be completed in the fall of 1962. Plans were developed for a new 12-bed hospital at Barrow, Alaska. Hospital additions at Red Lake, Minn., and Bethel, Alaska, were under construction. Alterations changing the former Fort Peck Hospital at Poplar, Mont., to an outpatient health clinic were underway. Contracts were being negotiated for plans and specifications for a new 27-bed hospital at Fort Yates, N. Dak., and for an additional wing and alterations at the Crow Agency Hospital, Crow, Mont. A study was underway of the feasibility of a 200-bed hospital in Phoenix, Ariz.

Ninety-five new quarters for personnel at various locations were under construction, and 119 housing units were completed.

PROSPECTS FOR THE FUTURE

The success of the drive against tuberculosis and other critical health problems of the Indians has brought brighter prospects for the liberation of these Americans from the bondage of illness. Health education is contagious. More and more Indian people are learning and using improved health practices in their homes and communities. Tribes are creating new health programs of their own, and expanding existing activities. The low economic level of the Indians and Alaska natives, the barriers of language and culture, the hazards of travel over miles of desert or tundra are formidable obstacles. But a sound beginning has been made. The program is moving with faster pace toward the time when people now aided by the Federal Government may well assume the major responsibility for their own health services.

Medical Services for Federal Agencies

The medical services of the U.S. Coast Guard and the Federal Bureau of Prisons are legal responsibilities of the Public Health Service and are operated by Bureau of Medical Services personnel assigned to these agencies. The medical programs of the Bureau of Employees' Compensation of the Department of Labor and the Maritime Administration of the Department of Commerce are conducted by personnel detailed to these agencies.

UNITED STATES COAST GUARD, TREASURY DEPARTMENT

A crew member aboard the U.S.C.G.C. *Northwind* while on the Bering Sea Patrol was struck by a large section of falling ice as it was being cleared from the vessel, and was knocked unconscious. Examination by the medical officer found the patient in shock, bleeding from the mouth, ears, and nose, and with serious head and back

injuries with suspected fractured skull and ribs. Treatment for shock was successful, and the patient soon became conscious and rational although in critical condition. He was evacuated by air to hospital facilities ashore. The physician, a Public Health Service officer, was credited with saving his life.

In all, 103 PHS officers served the U.S. Coast Guard in 1962—33 physicians, 52 dentists, 12 nurses, a pharmacist, a dietitian, a scientist, and a sanitary engineer. Most were on full-time duty. Some were on temporary assignment aboard vessels in the Bering Sea Patrol or icebreakers in the Arctic and Antarctic, or on ocean weather duty in the Atlantic and Pacific.

A training program to provide a small group of flight surgeons for the Coast Guard was begun. A training officer was added to headquarters staff to help develop training aids for nonmedical personnel, indoctrinate new professional personnel in military medicine, and review medical practices and standards. Improved utilization of mobile dental units was effected.

BUREAU OF EMPLOYEES' COMPENSATION, DEPARTMENT OF LABOR

In July 1961 a student employed during the summer as a smoke jumper with the Aerial Fire Depot, Forest Service, Missoula, Mont., sustained serious back injuries when dashed against a rock by oscillations of his parachute. This resulted in loss of use of both legs and loss of major functions of both arms. Following approximately a year of rehabilitation services at the Institute of Physical Medicine and Rehabilitation, New York City, he was able to move about in a wheelchair and was ready to go on with his education—to prepare for a suitable vocation. He planned to enter the University of Florida in the fall of 1962.

The case illustrates the continuing emphasis the Bureau of Employees' Compensation gave in 1962 to the rehabilitation of Federal employees injured in the performance of duty. Rehabilitation facilities throughout the United States were used. Through cooperation with the Office of Vocational Rehabilitation, there was increased utilization of State vocational rehabilitation services.

Medical officers of the U.S. Public Health Service are assigned to the Bureau and administer the complete medical program under the Federal Employees' Compensation Act and related acts. During the year the Bureau was completely decentralized. Field offices were established in San Francisco, Seattle, Chicago, Cleveland, Boston, New York City, Washington, D.C., Jacksonville, and New Orleans. Medical services for injured employees are provided by hospitals and clinics of the Public Health Service and other Federal hospitals. Where no Federal medical facilities are available, medical treatment

in private hospitals is provided through the direction of private physicians designated by the Bureau.

MARITIME ADMINISTRATION, DEPARTMENT OF COMMERCE

The physician and two dental officers on duty at the U.S. Merchant Marine Academy, Kings Point, N.Y., cared for the health of 700 cadet midshipmen. The medical officer in charge of the Public Health Service Hospital on Staten Island acted as professional consultant for the academy's health program.

There were 692 admissions to the academy's Patten Hospital. Out-patient medical services and treatments given by the physician numbered 4,066. There were 4,053 dental visits. The North Shore Hospital, a community hospital in Manhasset, N.Y., provided emergency medical care for cadets when necessary.

BUREAU OF PRISONS, DEPARTMENT OF JUSTICE

For the 32d year, the Public Health Service provided medical, psychiatric, psychological, dental, nursing, and related health services for Federal prisoners. The Bureau of Prisons operated 24 hospitals and 6 infirmaries in institutions over the country. Fifteen of the hospitals have been fully accredited by the Joint Commission on Accreditation of Hospitals.

Full-time staff assigned to the program numbered 272. The staff was augmented by 275 consultants in the various medical specialties. Approximately 900 prisoners were assigned to the medical services where they receive training and assist with hospital care.

There were more than 23,800 Federal prisoners at the end of the year. The hospitals provided 417,838 hospital relief days during the year, medical staffs performed 862 major operations and 6,649 minor operations, and the outpatient departments provided 1,054,502 treatments. A total of 36,634 physical examinations were performed. The two institutions for women reported 31 births. Deaths in all institutions totaled 45.

There was a continued increase in the demand for psychiatric diagnostic and treatment services, which are required under the provisions of the Youth Corrections Act, the New Sentencing Act, and the act providing for the care and custody of insane persons charged with or convicted of offenses against the United States. Efforts to recruit additional trained personnel to provide these services were continued.

Plans for New Psychiatric Hospital

In May 1962 the Attorney General announced that a new 700-bed psychiatric hospital for Federal prisoners will be located at Butner, N.C., a site within easy commuting distance of the Duke University, University of North Carolina, and Bowman-Gray medical schools.

Planning of the facilities was completed with the assistance of consultants from the National Institute of Mental Health, Saint Elizabeths Hospital, and the Veterans Administration. An architectural competition for the hospital design was held, and a design prepared by A. L. Aydelott and Associates of Memphis, Tenn., was chosen by the judges. The new hospital will provide a full range of facilities and resources for diagnosis, treatment, training, and research.

Recommendations of Advisory Committee

The Surgeon General's Advisory Committee on Hospitals and Clinics met at Atlanta in April 1962, following visits to prison hospitals, to consider the prison medical care program. The committee made a series of recommendations which included increases in staff and improvements in hospitals. These recommendations are receiving continued study.

Hospital Improvements

Modernization of the hospital at Chillicothe, Ohio, was completed; one wing was converted into office and conference rooms for the psychology training program. New offices were completed at the Atlanta penitentiary for the psychiatrist and psychologist. The hospital in Danbury, Conn., was renovated. Planning and construction of improved facilities for the care of disturbed psychiatric patients was underway in several locations. Some refurbishing of the hospital at Terre Haute, Ind., was completed. Construction of a new central dental laboratory was begun at Lewisburg, Pa.

Clinical Services

Cancer detection and the control of tuberculosis and other infectious diseases were stressed in preventive health programs at several institutions, including Alcatraz; Alderson, W. Va.; Atlanta; Leavenworth; El Reno, Okla.; and McNeil Island, Wash.

Psychiatric services were extended in several institutions through use of consultants. For example, members of the psychiatric staff at the Public Health Service Hospital, Lexington, Ky., now visit the Federal Reformatory for Women at Alderson regularly to provide much needed psychiatric consultative services for women prisoners. This gives the Lexington staff access to certain unusual cases with important teaching value, which can be transferred to Lexington for continued study and treatment. The staff at Chillicothe obtains specialized eye, ear, nose, and throat treatments for young men through a similar cooperative arrangement with the Ohio State University Hospital.

Continued emphasis was given to high quality dental care, use of group treatment methods, and careful control of sedative-type drugs to prevent any abuses in their use. Improvements were made in training programs for medical technical assistants and in the programs for training prisoners in nursing techniques. The central dental laboratory at the Springfield Medical Center completed 2,505 dental prosthetic appliances.

Demonstration Counseling

A demonstration project in group counseling was begun at the National Training School for Boys, Washington, D.C. Directed by a psychologist and a psychiatric social worker, the project is designed to establish a group counseling program using existing staff, and to measure the effect of the program on individual boys and on the school as a whole. Early reports indicated that the program was having a favorable effect in rehabilitation of youthful offenders.

Research

Recruitment of prisoner volunteers for cold virus studies conducted at the Clinical Center, National Institutes of Health, was continued. The staff at Leavenworth continued studies of prisoners with histories of drug addiction. At Lewisburg, a study to improve the standardization of the glucose tolerance test was begun. The psychiatrist and psychologist at Lewisburg are participating in this study with a pilot program designed to learn more about the motivation of prisoner volunteers. The staff at Atlanta worked with the Communicable Disease Center in a study of the transmission of gonorrhea, employing prisoner volunteers. Malaria studies at Atlanta were continued.

Participation in Community Affairs

Medical personnel shared professional experiences with colleagues in nearby communities. For example, the staff at Leavenworth attended medical grand rounds at the Wadsworth Veterans Administration Hospital and clinical pathological conferences at the Kansas City Medical Center. The staff at Ashland, Ky., exchanged visits with the Department of Psychiatry at the University of Cincinnati. The staff of the Medical Center for Federal Prisoners in Springfield, Mo., is active in the Greene County Medical Society, and psychiatric personnel from the Medical Center assist in the staffing of the Greene County Guidance Clinic. Prisoners' blood donations to the American Red Cross and local blood banks in 1962 totaled 12,531 pints.

Bureau of State Services

Programs of the Bureau of State Services are primarily responsible for the application of health knowledge in two broad areas of need—to encourage the development of comprehensive health services in the Nations' communities, and to safeguard human health against hazards of the natural and man-made environment. The solution to both these problems depends in large measure upon the actions of State and local health agencies. Therefore the Bureau concentrates a major share of its attention upon strengthening these activities—through grants in aid, through training and demonstration projects, and in many other ways.

The programs of the Bureau have been grouped into two operating units, concerned respectively with community and environmental health, to make possible a more efficient and effective attack on these problems.

Among the year's highlights was the passage of the Community Health Services and Facilities Act of 1961, designed to stimulate improved community programs, particularly for the chronically ill and aged. In the first 6 months of operation, 44 grants were awarded under this act, totaling \$2.3 million in Federal funds, to help support a wide range of special projects in this field.

The Robert A. Taft Sanitary Engineering Center, now directly under the administration of the Bureau, conducts an extensive program of research training and consultation in problems of air and water pollution, radiological health, and food sanitation. Many of its projects are reported by the divisions in these program areas. The Arctic Health Research Center at Anchorage, Alaska, conducts studies of special health problems related to life in cold climates.

Division of Accident Prevention

Support of research into accident causes and preventive measures increased about 50 percent, both in funds and in projects, in fiscal year 1962 over fiscal year 1961—38 grants and \$1,917,419 as against 25 grants and \$1,254,666. This graphically illustrates the increasing interest and ability of the scientific community to devote its capabilities toward providing needed basic knowledge of both the human and the environmental factors involved in accidents—still the fourth leading cause of death in the United States, the leading cause in the age groups from 1 to 35 years old, and the leading destroyer of the Nation's military and productive strength.

Similar progress accompanied the Division's efforts in areas of immediate, practical interest. A dramatic increase in the installation and use of automobile seat belts resulted largely from the Division's national campaign in cooperation with the American Medical Association and the National Safety Council. Results of the study on community organization and publicity to reduce accident rates in the Shenandoah Valley of Virginia were distributed to all public-health agencies. The Arkansas fire-prevention project continued to draw wide interest and praise from health and fire authorities. The "Blueprint for Life" program in Cleveland, Ohio, is providing valuable experience in the integration of all official civic and voluntary agencies on a concentrated effort to reduce accidents in a metropolitan area; the seven films produced in connection with it are now in nationwide use, and two were awarded Certificates of Merit by the National Committee on Films for Safety.

Among many major new projects begun in fiscal year 1962 are:

1. Establishment of a center for the study of accidents to the aged, in cooperation with the Florida State and Pinellas County Health Departments.

2. A study of emergency medical services, in cooperation with the California State and San Francisco City-County Health Departments.

3. A study of methods to prevent injuries to the head (especially dental, visual and hearing impairments) in contact sports and outdoor recreation.

4. A study of accidental poisonings among children, with emphasis on preventive measures, in Charleston, S.C. (The Division is a cooperative member of the Steering Committee for National Poison Prevention Week, which was proclaimed for the first time in March 1962 by the President. Over 470 poison-control centers are now affiliated with the National Clearinghouse in this Division.)

5. A study of prevalence and prevention of accidents involving glass doors and glass areas adjacent to glass doors.

6. A study in Philadelphia, Pa., into the effectiveness of the group-discussion technique in reducing accidents.

Many other projects are in various stages of planning, operation, and reporting, including such diverse subjects as mouth-to-mouth resuscitation; incorporation of accident prevention into the daily routine of local public-health nurses and sanitarians; accidents involving the use of power lawn mowers, flotation devices, guns, and coin-operated dry cleaners; and the comparative value of various media of communication in indoctrinating specific audiences.

Division of Chronic Diseases

In fiscal 1962 the program activities of the Division of Chronic Diseases focused largely on the expansion and improvement of community-based, out-of-hospital services for the chronically ill and the aged.

These activities were carried out in two principal stages:

1. The utilization of a 1.7 million dollar appropriation to stimulate and support a series of pilot projects in selected States and communities, and;

2. The rapid extension of such pilot projects to additional States and communities following passage in mid-year of the Community Health Services and Facilities Act of 1961.

The Division carried the major burden of administering the expanded program of formula grants in the Act as well as a new program of special project grants. Under the former responsibility \$4,858,872 (81 percent) of the total \$6 million appropriation was utilized by the States.

Of the 44 special project grants in the community health area which were approved and funded, 26 are being administered by the Division. These 26 projects account for nearly \$1 million of the total \$2.3 million first-year appropriation.

CANCER CONTROL

The Cancer Control Program is concerned with communication of "practice-ready" research information to medical and health workers in a form which will enable them to use it in their own communities.

Demonstration Projects

Grant projects offer (1) a means of testing and evaluating pilot programs under field conditions, and (2) an instrument utilized to demonstrate to local communities techniques and procedures of proven and established value. Since the inception of the project grant program in 1959, there have been 255 grants approved, in 34 States, the District of Columbia, Puerto Rico, and in cooperation with 4 national medical organizations. The amount of money involved totals \$6,564,219.

More than 250 conferences were held with staffs of health agencies in all of the States and Puerto Rico, largely to bring results of the experiences of demonstrations and pilot projects to other groups encountering similar problems.

It is generally accepted that the best opportunity for cancer control lies in cancer of the cervix, since the Papanicolaou smear offers the possibility of early detection. However, this program is an extremely

complex one which has in it many chances for error. Based upon 3 years of intensive work with cervical cancer detection programs, the Cancer Control Program stated the 14 elements which are essential to the successful detection project. Utilizing resources available in the demonstration grant system, 18 communities throughout the country, which have technical resources available for good control programs, were selected for "model" programs. These showcase communities are to be used to communicate the procedures of good cervical cancer control to other areas.

Clinical Traineeships, State Grants

During the year, a program of senior clinical traineeships was initiated. Support in the form of stipends is made available to fully-trained physicians who have completed resident training in a medical specialty and who desire additional training in the specialty as it deals with the management of patients with neoplastic diseases.

A system of grants to States for development of cancer control programs is being administered by the Cancer Control Program. In the fiscal year 1962, the amount granted to States was \$3,500,000.

DIABETES AND ARTHRITIS PROGRAM

Activities of the Diabetes and Arthritis Program continue to be directed toward the goal of minimizing the severity and complications of diseases in its area of interest by early detection and prevention.

Program Application

Consultative services to States and regions were continued along with provisions for supplying screening materials and temporary loan of personnel. Continued evaluation of diabetes reporting by States was executed. A system designed to facilitate statistical reporting was developed and initiated on a pilot basis.

Field trials of a teaching machine began. Adapted with a film sequence on diabetes, the machine was placed in various clinic settings for evaluation as a teaching method. Preliminary data suggest that it will be a valuable tool for education of both newly diagnosed patients and those with disease of long standing. Plans for a similar application of the teaching machine method to professional education resulted in extensive work on the filmstrip portion. Toward the end of the fiscal year, a physician director and a public health advisor were assigned to the Branch full-time for arthritis activities programming.

Applied Research

Plans took shape for studies in arthritis by the Boston Laboratory. Preparations were made for investigating methods of screening for gout and estimating its prevalence.

A study was initiated in a Federal prison to determine the reproducibility of the Glucose Tolerance Test and its proper place in the diagnosis of diabetes. Preliminary evaluation of data on the Federal Employee's Health Study was begun. Factors relative to the prediction of diabetes and its long and short-term effects on new found cases are being considered.

HEART DISEASE CONTROL PROGRAM

The Heart Disease Control Program provides professional, technical, and financial assistance to health departments in all States and Territories to help them apply heart disease research findings in as many communities as possible.

A major method is assignment of field officers to stimulate or conduct heart disease control programs. This year, 131 officers—medical, nursing, nutrition, social service, physical therapy, or public health advisors—have been assigned to States that requested them. Eleven career medical officers are training in public health.

Heart Disease in Children

Sixty-six laboratory technicians from all 50 States, 4 Territories, and 5 cities have now been trained in cooperation with the Communicable Disease Center in the fluorescent antibody technique for the rapid identification of the organism associated with the onset of rheumatic fever and rheumatic heart disease. In-State training courses have been conducted in 17 States for 320 technicians, and full use of training equipment and personnel is scheduled into late 1963. The aim is to make the technique widely available so that physicians will have a rapid means of diagnosing "strep throats" in order to prescribe antibiotic prophylaxis. Inexpensive portable equipment to tape-record heart sounds was developed for use in screening school children for heart disease, and preliminary field testing of the equipment was conducted in Dickinson, N. Dak., and Michigan City, Ind.

Heart Disease in Adults

Various projects have demonstrated effective methods of rehabilitating stroke patients, and services are being expanded. Prevention of strokes, though difficult, may be practical as a community service. A Portland, Oreg., study is investigating methods of preventing major strokes by early diagnosis and medical and surgical treatment of patients with signs and symptoms of cerebrovascular insufficiency.

Childhood obesity in relation to adult morbidity and premature mortality from cardiovascular and other diseases is being evaluated in a Hagerstown, Md., study.

An electronic system, including a digital computer, for analyzing electrocardiograms was developed and installed in Washington, D.C.

Tests relaying electrocardiographic signals by telephone from San Francisco and other locations to Washington will be conducted to demonstrate the use of the computer system as an aid to physicians in the diagnosis of heart disease.

The program is conducting four field stations. The Heart Disease Control Laboratory at the Communicable Disease Center serves as a "bureau of standards" for many State and epidemiologic laboratories for the development and standardization of cholesterol determinations. A field and training station was established in San Francisco to provide professional consultative and laboratory services to health agencies and medical groups in the West. The reasons for the large geographic differences in the occurrence of heart disease will be studied at the new Ecology Field Station in Columbia, Mo. The present study of the family aggregation of hypertension will be continued and new hypertension programs will be developed at the Memphis, Tenn., field station.

NEUROLOGICAL AND SENSORY DISEASE SERVICE PROGRAM

The Neurological and Sensory Disease Service Program, established in January 1962, launched a major national program to hasten community application of research knowledge in the care of persons with epilepsy, cerebral palsy, multiple sclerosis, Parkinson's disease, mental retardation, vision, speech, and hearing defects, and other disorders of the nervous system.

Project Grants

The first project grants made by the new program gave impetus to the development and support of State and local efforts to improve and expand community services. Twenty-three grants were awarded to official, voluntary, and private nonprofit agencies, medical schools, and medical centers in 13 States and the Virgin Islands to support projects encompassing a broad spectrum of activities.

Vision Conservation

The Glaucoma Collaborative Study, involving validation of various screening tests to identify glaucoma in the earliest stage, continued in its third year at five university clinics in California, Iowa, Maryland, Missouri, and New York.

At the University of Tennessee School of Medicine 300 of 4,500 persons screened for glaucoma have been selected for continuing study to confirm the efficiency of the Schiotz-type tonometer as a screening instrument. Evaluation of the effectiveness of followup procedures as a means of increasing the rate of successful referrals from glaucoma detection programs was inaugurated at the University of North Carolina School of Public Health.

Glaucoma test demonstration manikins were developed to provide physician orientation in testing for glaucoma. The plastic life-like models of the human head have movable eyelids and eyes that provide tension readings in the normal and glaucomatous range in alternate eyes when tested with the Schiotz tonometer.

Hearing Conservation

A regional audiometric calibration center is being established at the North Carolina School of Medicine. The purpose is to determine the feasibility of such regional facilities for use by local programs, and their relationship to promotion of community speech and hearing conservation programs.

HEALTH SERVICES FOR LONG-TERM ILLNESS PROGRAM

The program is concerned with the development of programs and projects for preventing the onset or progression of chronic disease and disability as well as care services both in nursing homes and in non-institutional settings.

Support of Projects

An increase in direct operation funds during the fiscal year enabled the program to award \$1.2 million to 47 nonprofit organizations and official health agencies in the form of contracts and cooperative agreements.

The projects varied in complexity and scope from the creation of a homemaker program by a hospital in a rural community in Nebraska to a nationwide program by the National Society of Crippled Children and Adults to eliminate those architectural barriers in public buildings which prevent disabled persons from participating in normal activities.

The program supported a 2-week national conference at Michigan State University attended by nutritionists and dietary consultants from 28 States to demonstrate new techniques for improving food service standards in nursing homes.

An experimental and intensive 6-week summer school course in nursing home administration carrying degree credit, the first of its kind in the Nation, was conducted by the University of Oklahoma; 33 students from 16 States attended.

Development of Materials, Data Collection

The Kenny Rehabilitation Institute in Minneapolis received financial support from the program to develop resource material for the training of personnel who will provide rehabilitation nursing.

A project intended to stimulate medical schools and schools of public health to incorporate into their curricula the concepts and methodology for the prevention of disability is in progress.

Four workshops based on a simplified method of teaching nursing skills were conducted by the program. An Instructor's Guide for Teacher Training Courses is being prepared.

Program staff worked on the compilation of data received from the first national inventory of coordinated home-care programs. Two regional workshops on home care were held during the year and a second National Workshop for Home Care is scheduled for December 1962.

Communicable Disease Center

The Communicable Disease Center, Atlanta, Ga., carries out Public Health Service programs in the control of infectious diseases. It conducts epidemiological, field, and laboratory studies and provides various types of technical assistance to State health departments. Because of the global nature of infectious diseases, CDC also participates in health efforts around the world. It provides technical support and personnel for the health programs spearheaded by the International Cooperation Administration. It also cooperates with the World Health Organization through representation on expert advisory panels and committees and as a laboratory diagnostic and study center.

Plans were completed for the physical transfer of the Tuberculosis Branch from Washington to the Atlanta headquarters, although the move did not take place until the beginning of the 1963 fiscal year. This transfer brings to the Atlanta headquarters all of the CDC Branches: Epidemiology, Laboratory, Technology, Tuberculosis, Venereal Disease, Training, and Audiovisual, which was given branch status this year.

Of special note was a series of 13 3-day seminars on hepatitis beginning early in 1962 and continuing throughout the spring, summer, and fall. Sponsored in cooperation with State public health associations, the seminars were designed to communicate existing knowledge of hepatitis and its control to State and local practitioners of public health. The seminars followed in the wake of an unusually high number of cases of hepatitis in 1961. Additional seminar series are planned in other important diseases.

Also of special interest was a program of communicable disease control demonstrations sponsored by CDC in cooperation with State and local health departments and DHEW Regional Offices. The demonstrations are designed to measure selected communities for their health status, including immunization levels and conditions favorable to transmission of communicable diseases. Effective prevention and control measures will later be demonstrated. Demonstrations have

been initiated in Huntsville, Ala.; Fredericksburg, Va.; and Lebanon, Pa.

EPIDEMIC AND DISASTER AID

Epidemic aid included calls in 27 States, four Indian reservations, an interstate steamboat, a U.S. Navy base, Chile, the Philippines, Honduras, and American Samoa. Also investigated was a *Salmonella hartford* epidemic involving 19 States.

Hepatitis led with eight epidemic aid calls. There were five influenza calls and four poliomyelitis calls. Other calls were for enteric diseases, Coxsackie infections, diphtheria, encephalitis, staphylococcal infections, plague, tularemia, histoplasmosis, erythema infectiosum, rabies, measles, and typhoid. CDC assisted the Texas State Department of Health with vector control during hurricane Carla in 1961.

REPRESENTATIVE DISEASE STUDIES

Quota Sample Surveys

The quota sample survey, a useful tool developed at CDC in 1959 to assess polio immunization levels of different population groups within a community, was adapted to include diphtheria, whooping cough, and tetanus. CDC has contracted with the Bureau of the Census to include questions on immunization against these four diseases in its Current Population Survey. Methods are being developed to improve the immunization level of infants in the lower socioeconomic groups shown by quota sampling surveys to be the hardest to reach.

Venereal Diseases

The threefold increase in reported cases of infectious syphilis since 1957 underscores the urgency of the National Venereal Disease Program's syphilis eradication campaign. All available resources of the National Program are directed toward implementing the recommendations of the Task Force on Syphilis Control in the United States.

This five-member Task Force, in its report to the Surgeon General, pressed for increased effort in epidemiology, development of a comprehensive educational program, continued research in immunology, therapy, and laboratory procedure, and expansion of research in the sex behavior of adolescents and young adults.

Epidemiologic activities were strengthened along lines recommended by the Task Force. Shortage of venereal disease control personnel has always hampered operations in the field. On July 1, 1962, the National Program assigned 461 persons to State and local health departments to assist them in eradication activities.

Another high-priority item was the development of a comprehensive educational program to reach the general public and also professional personnel, including physicians, nurses, teachers, social workers, ministers, and youth and family-serving agency personnel.

Laboratory research was continued to develop new diagnostic tests and to refine widely-used older ones for syphilis and gonorrhea. Of particular interest in syphilis serology was the development of the Rapid Plasma Reagin (RPR) card test. Featuring the use of a plastic-coated card, this test can be completed quickly outside the laboratory. It is intended primarily for screening purposes. Additional progress was made in the effort to develop an effective fluorescent antibody procedure for detecting *Neisseria gonorrhoeae*. Such a procedure would have particular value in diagnosing gonorrhea in the asymptomatic female.

Tuberculosis

Continued gains in the control of tuberculosis are contingent on bringing all known patients under treatment. In 1962 Congress for the first time authorized special project grants for tuberculosis. Twenty-six areas with unusually severe tuberculosis problems received grants to improve their services to these patients and their contacts, and, in some instances, to increase diagnostic services for persons with X-rays suggesting tuberculosis.

Funds were used also to provide three 3-day regional symposia on "Rational Therapy and Control of Tuberculosis" for physicians. Some 350 physicians in public health and clinical practice attended the symposia.

Large-scale prophylactic trials of isoniazid, a drug widely used in the treatment of tuberculosis, showed it to be effective in preventing disease among household contacts of patients during the year the drug was taken. Further observations are being made to determine the duration of protection after the drug is stopped and to see whether there are any unsuspected beneficial or detrimental long-term effects of the drug.

Influenza

Warning of expected widespread outbreaks of influenza in the United States in the winter of 1962-63 was made public in April. The warning was based on findings of the Surgeon General's Advisory Committee on Influenza, which met in Washington, D.C. The public was informed that population groups at highest risk should begin immunization by September.

In their capacity as International Influenza Center for the Americas (WHO), CDC's respirovirus laboratories were instrumental in identifying strains of virus active within the Western Hemisphere.

Isolation of influenza A from other countries led to the prediction that Asian influenza would recur during the winter of 1962-63.

Poliomyelitis

Pending the licensing of all three types of Sabin oral polio vaccine, CDC urged mass use of Salk vaccine during the fall and winter to protect infants, pre-school children, and other susceptible groups in advance of the polio season. The CDC epidemic reserve of oral polio vaccine has been used to stop epidemics in Syracuse, Atlanta, Laredo, San Antonio, and Newberry County, S.C. These areas received over 3 million doses. Also, in a gesture of international good will, CDC rushed 354,000 doses to Chile to stop a severe epidemic.

Measles Vaccine Trials

Trials were conducted cooperatively with health departments in Seattle, Cincinnati, Rochester, Buffalo, and in DeKalb County, Ga. A series of three injections was given to 4,860 children: 50 percent received placebos, 25 percent received 2 injections of killed vaccine and 1 of live vaccine, and 25 percent received 3 injections of killed vaccine.

Leprosy, Other Diseases

For the first time in medical history, a technique of growing leprosy bacilli (*Mycobacterium leprae*) has been developed. It is being grown in the footpads of mice at CDC, and will provide an effective means for testing different drugs. Preliminary results of experimental work at CDC also indicate that a vaccine against leprosy is likely. Research shows that BCG vaccine imparts significant levels of immunity against *M. leprae*.

The CDC also made important progress with regard to salmonellosis, rabies, mosquito-borne viral encephalitis, and vector control.

LABORATORY

A major step benefiting diagnostic laboratories in the world is the development of model specifications for production of bacterial and viral reagents. Diagnostic reagents standardization is being developed in close cooperation with the NIH program for developing specifications for respiratory virus reagents. An ad hoc committee of experts drew up model specifications for the Laboratory Branch. Production specifications for most commonly used reagents should be available to commercial companies within 3 years.

Three years of effort in developing a single standard complement fixation test applicable for use as a diagnostic procedure for identification of fungal, viral, parasitic, and bacterial infections met with success during fiscal year 1962. A standard test, the "Laboratory Branch Complement Fixation Test" (LBCF), has been evaluated, its

sensitivity and specificity found acceptable, and the protocol distributed to State laboratories.

AUDIOVISUAL

On January 1, 1962, the National Archives of Medical Motion Pictures were transferred from the National Library of Medicine to the Public Health Service Audiovisual Facility at CDC. The Facility is developing as a national information center on medical films and where they can be obtained.

During the year, the Facility completed 28 motion pictures, 26 filmstrips, and 26 exhibits. More than 50,000 showings of CDC films throughout the country reached an estimated audience of more than 2 million people.

TRAINING

More than 9,000 persons from State and local health departments, Federal agencies, academic institutions, industry, and other organizations attended 379 CDC courses in communicable disease control presented throughout the country and at CDC headquarters. Of these, more than 2,000 persons participated in short seminars—developed to present current data on single subjects of immediate, widespread interest—at 13 State public health association meetings, and 148 attended the MEND symposium on Control of Infectious Diseases in Emergencies.

CDC's training personnel also developed courses and training material for other Divisions of the Public Health Service and for the Peace Corps. Under contract with the Department of Defense, they reviewed now rare communicable diseases that might become important in a major disaster.

Division of Community Health Services

In the area of community health services, an important forward step was the establishment in November 1961 of the Division of Community Health Services.

The Division's responsibilities are to coordinate the Service's activities in the fields of medical care administration, health economics, and public health administration. It administers public health training grants and awards programs, and coordinates the administration of special project grants affecting community health services. Health education, migrant health, and school health are also Division responsibilities.

GRANTS FOR IMPROVING COMMUNITY HEALTH SERVICES

Special Project Grants

One hundred and ninety-four applications were received and 44 projects approved and funded this year under provisions of the Community Health Services and Facilities Act. The applicants represent a wide variety of public and other nonprofit national, State, and local groups.

Many of the projects now in progress are concerned with some particular aspect of out-of-hospital care for the chronically ill and aged. Others are aimed at basic problems of comprehensive care and community coordination involving all pertinent public and private organizations in their areas.

One community project would provide a full range of medical and other out-of-hospital services to medically indigent individuals on an outpatient basis. The center represents the combined resources of five of the community's hospitals. It will also coordinate home nursing, physical therapy, homemaker, psychiatric, and screening services through inter-agency cooperation.

Another is working toward the establishment of a regional health information center. It will utilize electronic equipment to store patient data and will make this information rapidly available in order to improve patient care. The center will also serve teaching and research purposes.

No organized community efforts have responded effectively to health problems identified by Selective Service rejections. Now two large cities are operating pilot projects to pave the way for a nationwide program for helping these young men.

Formula Grants

The strongest direct impact of Federal aid on community health probably is to be found in the response of State health departments to the new chronic illness formula grants. With a few exceptions, State health departments are using the bulk of these funds to strengthen central staff concerned with the chronically ill and aged. As a result, for example, additional numbers of these people will receive some measure of community health service in their own homes; more nursing homes will offer a better than minimum standard of care to their patients; more people will be screened for certain chronic conditions.

TRAINING

Larger appropriations to the Public Health Service have enabled schools of public health, nursing, and engineering to increase enrollment and strengthen their educational programs. An encouraging

amount is going into programs in the newer aspects of public health—such as medical care administration, air and water pollution, control of chronic diseases, radiological health, accident prevention, and metropolitan planning.

MIGRATORY AGRICULTURAL WORKERS

The Division has developed plans for implementing the President's recommendations on migrant health in his Health Message of 1962. Under these plans, special project grants to public and private organizations will be made for establishment and operation of family health service clinics and other projects to improve migrants' health services and conditions.

OTHER DIVISION ACTIVITIES

A source book on medical care financing and utilization was completed.

The Division assisted in planning and carrying out the International Conference on Health and Health Education, held in the United States for the first time.

Studies conducted or under way include one to correlate chronic illness morbidity with expenditures for medical care; an analysis of X-ray and laboratory costs for a defined population; two studies on prepayment for drugs; and several projects in the area of the behavioral sciences.

In cooperation with the Children's Bureau and the Social Security Administration, the Division published a *Directory of Homemakers Services—1961*.

Division of Dental Public Health and Resources

The Division seeks to promote an adequate supply of dental manpower and to assure that professional skills are used most efficiently and effectively; to assist State and local health agencies in expanding dental health programs and to experiment with methods for their improvement; to influence more people to seek dental care and to find ways of making care available to those whose needs cannot be met under current patterns of dental practice. It is concerned as well with both research into the prevalence of dental diseases and a wider application of known measures of prevention.

STRENGTHENING MANPOWER AND EDUCATIONAL RESOURCES

A better trained and more productive dental force is essential to adequate dental care for all our people; and the Division emphasizes programs which will stretch the available manpower supply by teaching dentists more efficient methods of practice. In 1962,

undergraduate students in 42 dental schools were learning to work effectively with chairside assistants under a grants program administered by the Division. Proper use of a chairside assistant enables the dentist to provide improved services for more people.

In cooperation with the Division, six universities, junior colleges, and vocational schools were engaged in experimental programs testing how much and what kind of training a qualified dental assistant should have. The Division continued its effort to stimulate interest in dental assisting as a career by preparing brochures and a recruitment film and by developing a program to aid vocational educators in inaugurating and expanding dental assistant training courses.

Continuing activities in dental education included preparation for a comprehensive survey of the costs of dental education, to be conducted in cooperation with the American Association of Dental Schools, and consultative services to domestic and foreign dental schools on facilities planning. Research in programmed instruction in selected aspects of dental education initiated this year will seek ways of improving the dental curriculum.

SPECIAL PATIENT CARE

The dental health of millions of aged, handicapped, and chronically ill persons poses a particular challenge to dentistry and public health agencies. The institutionalized and homebound cannot go to the dentist; the dentist traditionally is neither prepared to go to the patient nor schooled in the techniques of care for patients with handicaps. Programs initiated this year in 10 dental schools are giving students necessary technical training and practical experience in treating institutionalized and homebound persons. Extension of the programs to other schools will assure that future dentists are prepared to treat special patients. Publication of *Dental Care for the Chronically Ill and Aged: A Community Experiment*, a report on the Division's 4-year study of the dental treatment needed by the chronically ill and aged of Kansas City and a service program conducted to meet that need, provides guidance and stimulus for community action. A hospital-centered program established this year in Missouri will obtain additional information on the problems of service for special patients and provide a second prototype for community programs.

DENTAL CARE FINANCING PLANS

Dental prepayment plans have proved to be a potent weapon not only in reducing the cost barrier to the receipt of dental care but in increasing utilization of services. The Division encourages the development of dental care financing plans by assisting professional and

consumer groups in their organization and operation and by operating a national clearing house for information on prepayment.

ATTITUDE STUDIES

Studies conducted by the Division attempt to reveal why people seek, or fail to seek, dental care, why they support, or oppose, such measures as the fluoridation of water supplies, and why they choose to enroll in dental prepayment plans.

COMBATING DENTAL DISEASES

To strengthen its efforts to promote the use of fluoridation, the one best means of preventing dental caries, the Division established a special fluoridation unit staffed by specialists in engineering, social science, information, and statistics to provide assistance to States and communities seeking to adopt water fluoridation. As of June 30, 1962, over 42,350,000 people in 2,245 communities were enjoying the protection derived from drinking artificially fluoridated water.

Testing of home fluoridators, intended for areas where central water supplies are not used, devices for defluoridation of water with excessive fluorides, and the effects of fluoridating school water systems continued. First-year examinations were conducted in a study of the effectiveness of a stannous fluoride dentifrice on 2,200 children in Seattle, Wash. Continuing also was a study of cytological testing of oral smears as a screening method in the early detection of oral cancer.

IMPROVING DENTAL PUBLIC HEALTH PRACTICE

Completion of a comprehensive survey of State dental programs, which includes details of activities, staffing, and financial support, provided information necessary to efforts to improve the practice of dental public health. A similar survey of community dental health programs was initiated in 1962.

A NATIONAL DENTAL CENTER FOR RESEARCH AND TRAINING

Formally opened on November 6, 1961, the Dental Health Center in San Francisco is a new facility for applied research into the epidemiology of dental diseases and methods for their prevention and for the training of dental public health workers. Already underway is the first comprehensive birth-record study ever undertaken of cleft lip and palate, malformations which afflict 250,000 people.

Training programs at the Center, now just beginning, ultimately will teach dental public health personnel from State and community agencies and foreign countries better methods of conducting public programs.

Division of Hospital and Medical Facilities

In steadily increasing numbers, communities around the Nation are finding that their growing health facility problems can best be resolved through coordinated communitywide planning. Thus, the Division of Hospital and Medical Facilities, during the past year, has directed much of its efforts to providing guidance along with the necessary incentive for communities to carry out such planning. In addition to providing leadership to State and local planning agencies in the planning process, grants were awarded to a dozen communities where planning activities are being accelerated. The experience gained will have widespread application for other communities with similar problems. These grants are the first to be made for this purpose under the newly expanded Hill-Burton hospital research and demonstration program made possible by the 1961 Community Health Services and Facilities Act.

There are many other continuing activities in the planning area in which the Division staff is engaged.

PROGRAM HIGHLIGHTS

For the public at large, the Hill-Burton program is thought of chiefly in terms of its tremendous impact on hospital and medical facility construction in every section of the United States. While in itself an outstanding achievement, of equal—if not greater—importance are the qualitative contributions of the program enumerated below:

Continuous statewide planning for additional hospitals and health facilities was initiated, bringing a sense of orderliness to the improvement and distribution of facilities within each State.

Standards of bed and facility needs were introduced.

A better distribution of facilities has been achieved, vitally needed physicians and board qualified specialists have been attracted to many rural areas, and, in general, the quality of medical care in rural areas has been upgraded.

Health facility operations have been improved through the requirement of the Hill-Burton program that States adopt standards of maintenance and operation for health facilities constructed under the program. Most States have gone much farther than is required by this legislative provision by making such standards applicable to all health facilities and establishing such standards in the form of a licensure program.

THE CONSTRUCTION PROGRAM

Although a large portion of the Hill-Burton funds goes into the construction of general hospitals, other types of facilities are also

provided grants. These grants average approximately one-third of the total cost of the projects. Other facilities aided include nursing homes, diagnostic and treatment centers, chronic disease hospitals, mental hospitals, public health centers, rehabilitation facilities, tuberculosis hospitals, and State health laboratories. Federal funds in the amount of \$1.8 billion have been channeled into the construction and remodeling of these facilities as of June 30, 1962. Since the first Hill-Burton grant was awarded in 1947, a total of 6,236 projects have been approved. Of this total, 4,728 were completed and in operation as of June 30, 1962. The remaining 1,508 are under construction or in the planning stage. These projects will provide 274,208 inpatient beds and 1,644 other health facilities.

RESEARCH ACTIVITIES

A growing activity in the Hill-Burton program is hospital research which operated on a budget of \$8.1 million last year as compared with \$1.2 million which was authorized during previous years. Some of the areas of investigation include the development of more effective organizational patterns for providing services; better community planning and coordination of hospital facilities and operations; improvements in architectural and equipment design; noise control; fire and explosion hazards; bacterial contamination in hospitals and other health facilities; and the various aspects of progressive patient care.

UNMET NEEDS

A constant effort is being made to adjust the program to resolve the wide array of health facility problems which still confront the Nation. Chief among these are: obsolescence of many facilities—mainly in metropolitan areas; an ever-increasing critical shortage of long-term care beds; the need for better planning and coordination of health facilities; and the acute shortage of community-based facilities and services for the mentally ill and mentally retarded.

Division of Nursing

The Division of Nursing, with its responsibility for a diversified program of consultation to health agencies and institutions, training for nurses, and research, is constantly seeking new and improved ways to meet the increasing and pressing nursing needs.

TRAINING IN RESTORATIVE NURSING

Funds were made available by the Congress this year for demonstration training for public health nurses in new methods of restorative nursing services for the chronically ill at home; and the Division

negotiated special contracts with two universities and one hospital to sponsor intensive courses. As a result, about 100 nurses will have the opportunity to learn the newest restorative measures which can be applied for patients in their own homes or in nursing homes.

OUT-OF-HOSPITAL NURSING CARE

Still the greatest single nursing need is for more care available to patients outside hospitals, and especially to the chronically ill at home. The Division made a significant contribution in this area through provision of consultation, methods and materials to help States and agencies developing programs of nursing care in the home.

Two projects were completed and publications issued to promote extrahospital nursing services. "How to Determine Nursing Expenditures in Small Health Agencies" (PHS Pub. No. 902) outlines a simple time study method which agencies with limited accounting resources can use for establishing appropriate fees for various nursing services. Conferences to teach its application have been held on request in 10 States to date. "Nursing Care of the Sick at Home in Selected U.S. Cities" (PHS Pub. No. 901) updates the information first collected and analyzed by the Division in 1959 on the extent and distribution of agencies in the Nation which regularly provide home nursing care for the sick.

A survey planned last year is underway to determine the proportion of patients receiving care at home who are over 65, the services they require, and source of payment.

Extensive consultation was given to State health departments on the use of formula grants for extension of nursing services and on applications for nursing project grants. Five nursing projects were approved this year.

HOSPITAL NURSING

Studies of outpatient nursing activities to improve services were completed this year cooperatively with three university hospitals. Findings show that administration could be improved so that patients could receive more skilled care if professional personnel were relieved of messenger, clerical, and other miscellaneous duties. Consultation was given to 18 hospitals in two States on studies of nurse utilization in inpatient units, and to another State which is conducting a state-wide study of nurse utilization in 25 hospitals.

FIELD CENTER FOR NURSING STUDIES

Initiating a response to a long-recognized need, the Division was able to establish, equip, and staff in San Francisco, a small nursing research field center for nursing studies and demonstrations. Studies have already been undertaken, cooperatively with the Public Health

Service Hospital there, to determine optimum staffing patterns and standards for quality of care.

MANPOWER AND RELATED STUDIES

The most comprehensive inventory of the Nation's nurse supply ever conducted will be carried out by the American Nurses' Association under contract agreements arranged by the Division. To be completed by October 1963, the inventory will provide an enumeration of nurses by city and State, as well as other data including areas of specialization. The Office of Civil Defense, Department of Defense, contributed funds to help finance this project.

The Division's biennial census of public health nurses has been expanded this year to include data on the work of nurse consultants in State and local health agencies and boards of education.

For several years communities have been offering refresher courses to reorient inactive nurses to current practice and encourage their return to nursing, but the effect of such courses had not been evaluated. This year, in cooperation with the Chicago Council on Community Nursing, a follow-up study was completed of 453 refresher "graduates," most of whom had been professionally inactive for 10 to 24 years. The study revealed that three-fourths of their number are now at work and making a significant contribution to nursing.

Inactive nurses in 12 States are being asked if they plan to return to work and under what conditions they would do so. Some 9,000 nurses in 6 States have already responded to their questionnaires.

Data from 6,000 questionnaires are being analyzed to determine what proportion of needed nursing service the 66,000 "part-time" nurses in hospitals actually supply. A tentative finding is that a part-time nurse works about 20 hours a week.

All 1,800 nurses in Wyoming are being asked by questionnaire about their employment history for a 2-year period to find out more about the factors contributing to mobility.

For the 1964 conference required by law to evaluate the professional nurse traineeship program, work is progressing on the study of educational needs of nurses.

PROFESSIONAL NURSE TRAINEESHIP PROGRAM

A total of \$6,604,000 was appropriated this year to help prepare professional nurses as teachers, supervisors, and administrators.

Ninety-three schools of nursing and of public health received grants to support full-time long-term study for 2,000 nurses. The program also enabled 6,000 nurses to participate in 125 short-term intensive courses, including 10 home health institutes for 200 students.

SUPPORT OF EXTRAMURAL RESEARCH AND RESEARCH TRAINING

Awards under the Research Grants and Fellowships Program reached almost \$1,900,000. Of this total \$1,500,000 was for research projects and the remainder for fellowships and a new program of research training. The first grants for research training for nurses were awarded to the University of California at San Francisco, which will offer nurses preparing for research a doctoral program in sociology and to Boston University for similar programs for nurses in psychology, biology, anthropology, or sociology. Full-time predoctoral fellowships were awarded to 62 Fellows, including 26 new appointees, for study at 27 universities. Fellows are enrolled for research training in graduate departments of education, social and biologic science (including human growth and development), and biostatistics.

Funds for research supported continuation grants for earlier studies and 15 new projects—more than half of which are in clinical areas.

INTRA-AGENCY COOPERATION

To assist the Surgeon General's Consultant Group on Nursing in arriving at recommendations for the Federal role in improving nursing service, the Division supplied staff and services. Statistical and research personnel made projections of future nurse supply and demand, interpreted study data on costs of nursing education and professional school capacity, and developed an analysis of needs in research and graduate education.

Division of Air Pollution

With the swift advances of our scientific-technologic age, the protection of the air around us as a vital environmental resource has surged into a national problem of critical importance. The problem is compounded by the concentration of population in metropolitan areas.

To help combat this growing problem, the Division of Air Pollution is authorized (by Public Law 84-159) to conduct a national program with three principal features: research, personnel training, and technical assistance to States and communities.

RESEARCH

In response to the directive contained in Public Law 86-493, the Division made a thorough study of the health effects of motor vehicle emissions. The final report, entitled "Motor Vehicles, Air Pollution, and Health," incorporated the findings of many intramural research

projects and extramural research grants, and was presented to Congress in June 1962.

Continuing field studies sought to determine the relationship of air pollution to asthma, industrial absenteeism, respiratory infections, respiratory symptoms, pulmonary function, and infant mortality. Laboratory studies on health effects were expanded. Many of these explored the biological and physiological effects of air pollutants on animals. Lung cancer of a type found in humans was produced in mice exposed to ozonized gasoline following recovery from an influenza virus infection. Animals were also rendered more susceptible to respiratory infections from a bacterium causing pneumonia following exposure to ozone or nitrogen dioxide.

INSTRUMENTATION, SAMPLING, AND ANALYSIS

Further advances were made in designing instruments for sampling pollutants or assessing their effects. Improved filter devices were developed for industrial-type installations.

The National Air Sampling Network continued sampling particulates and certain gaseous pollutants. A Continuous Air Monitoring Program was established in seven cities to record continuously the concentration of seven different gases.

TECHNICAL ASSISTANCE AND TRAINING

Statewide air pollution surveys were completed, in cooperation with each State's health agency, in Colorado, South Dakota, and Kansas; and substantial assistance was given in surveys conducted by State or local health departments in eight other States.

Intensive technical courses in air pollution were given at the Sanitary Engineering Center to 193 trainees. Two field courses were presented 8 times, to 801 trainees.

GOALS

To explore ways of utilizing more widely and more rapidly technological control measures which are already available is one of the major objectives of a forthcoming National Conference on Air Pollution, called by the Surgeon General, to be held in Washington December 10-12, 1962.

The Division continues to be guided by the basic recommendations for air pollution research and time phasing which were presented in the 1960 report (by the Surgeon General's Task Group) entitled "National Goals in Air Pollution Research." The 1962 report of the Surgeon General's Committee on Environmental Health Problems (the Gross Committee) endorsed these goals but found the recommended level of support to be "minimal." The report identified the following areas as currently in need of particular emphasis: studies

of urban pollution levels; interrelationships of air pollution and the social and economic development of communities; development of automatic instrumentation for identification and measurement of air pollutants; interactions of pollutants in the atmosphere; and synergistic effects of pollutants on physical and biological systems. The Division will undertake to provide that emphasis.

For the long run, the Division's primary goals will be to learn more about the health effects of air pollution and—above all—to expedite the translation of what is now known and what is learned hereafter about air pollution into actual control measures.

Division of Environmental Engineering and Food Protection

Programs carried out in this division are directed to safeguarding drinking water, milk, and other food supply; controlling environmental dangers which arise because of urbanization; and protection against environmental risks encountered in the home, at work, while aboard common carriers in interstate travel, and in outdoor recreational areas.

MILK AND FOOD BRANCH

Technical assistance was given to all States and to industry. More than 120 seminars and training courses on milk and food sanitation attended by over 7,000 individuals were sponsored or participated in by PHS milk and food personnel.

Participation by States in the Cooperative State-PHS Program for the Certification of Interstate Milk Shippers increased for the tenth consecutive year. The *1962 Food Service Sanitation Manual* was published as a guide for both public health agencies and the food service industry in the conduct of effective food protection programs. A method has been devised for removing strontium-90 from milk by ion-exchange resins. A pilot project, cosponsored by the Public Health Service, the Department of Agriculture and the Atomic Energy Commission has been established at Beltsville, Md. Studies have been initiated on iodine-131 countermeasure proposals in cooperation with State and local health agencies and national dairy industry organizations.

SHELLFISH SANITATION BRANCH

During the year a new Shellfish Sanitation Branch within the Division was created to strengthen and emphasize this activity. Two Shellfish sanitation research centers, one at Kingston, R.I., and the other at Dauphin Island, Ala., were authorized.

During 1962, 22 shellfish producing States participated in the Co-operative Program for the Certification of Interstate Shellfish Shippers. The Fourth National Shellfish Sanitation Workshop was held in Washington, D.C., with an attendance of 148 persons including industry, State agencies, the Federal Government, and the Government of Canada.

A survey party from the Division visited the Hiroshima area of Japan at the request of the Japanese Government to review the sanitary aspects of shellfish production prior to the completion of an agreement between the U.S. and the Japanese Government covering importation of fresh or frozen shellfish between the two countries.

SPECIAL ENGINEERING SERVICES BRANCH

Two publications dealing with recreational sanitation were issued, and special efforts were devoted to solid waste engineering activities. In cooperation with the Office of Education a manual on environmental engineering for the schools was produced and distributed. A major aspect of the Branch's activities continues to be the handling of requests from individuals, organizations, and governmental agencies on problems of general sanitation.

INTERSTATE CARRIER BRANCH

In carrying out PHS regulatory functions under the Interstate Quarantine Regulations, special citations and letters of commendation for excellence in sanitation were awarded to 20 railroad and 41 vessel operating companies during the year.

The Advisory Committee on Revision of the Public Health Service Drinking Water Standards completed its work and the 1962 standards became effective April 6, 1962. Drinking water supply quality was determined nationally by analyses of 194 public water supplies in 134 cities. Studies were continued on possible relationships between drinking water quality and cancer, heart disease, and infectious hepatitis. The Division assisted Alabama University research scientists in their study of water quality and possible relationship to the incidence of arthritis; the State of Maine in a study of agricultural insecticides and water supplies; and the Department of Defense in a study of drinking water stored in public fallout shelters.

Division of Occupational Health

As American technology develops, occupational health must not only continue the application of conventional methods for the detection of old and new toxic agents, but must also extend its traditional concept in new dimensions. The combined effects of physical and

chemical agents, for example, require deeper study. The psychological component of occupational health problems must also be persistently considered. The role of the occupational environment in the cause and progression of chronic diseases, too, must be studied more thoroughly.

The establishment last year of a section of physiology and the addition of a staff psychologist will permit a new depth and direction in studies by the Division of Occupational Health. This new direction is reflected in a changing emphasis in the noise studies being conducted by the Division. Long interested in the effects of industrial noise on hearing, the Division is now probing psychologic and neurophysiologic effects.

In toxicology, a new area of exploration is opening up with recent work on a predictive test of hypersusceptibility to hemolytic chemicals and drugs. This test is based on the detection of inherited deficiencies of specific enzymes. Predictive tests may have great significance for industry, where approximately one million workers are involved in the manufacture of industrial chemicals and several times that number are exposed to chemicals through handling and use.

Field studies during the year ranged from health hazards in uranium mining to health and medical problems at airports. Field work in the revaluation of the silicosis problem in the metal mining industry was completed, and the extensive data are now being analyzed.

The strengthening of the Division's statistical competence has permitted expanded studies of occupational morbidity and mortality. Currently, mortality records of workers in the asbestos products industry throughout the country are being examined, with a detailed and searching analysis of the mortality experience of asbestos products workers in a selected State. This epidemiologic technique, using records of the Federal Bureau of Old-Age and Survivors Insurance, will be extended to other industries.

At the request of the governor, the Division undertook a study of occupational health problems and needs in the State of Washington.

As part of its program to offer short-term training courses not given elsewhere, the Division presented 16 separate courses. In addition to basic courses on industrial hygiene engineering and chemistry, four special technical courses were given on ion exchange techniques for fluoride and mercury, heat stress and its control, solvent analysis techniques, and air sampling and evaluation. Special workshops and courses were also held for local health officers, occupational health nurses, and sanitarians.

Division of Radiological Health

The Division of Radiological Health is responsible for the development of a public health program to prevent undue radiation exposure of the population. The principal components of this program are environmental surveillance and special radiation safety activities, technical assistance to the States, basic and applied research, and training of radiological health personnel.

ENVIRONMENTAL SURVEILLANCE

With the resumption of Soviet nuclear testing in September 1961 and U.S. testing in April 1962, the Division's radiation surveillance activities were accelerated and expanded. A Radiation Surveillance Center was established in the Division to provide comprehensive and continuing evaluation of environmental radioactivity data collected by the Federal-State monitoring networks.

More than 20 air sampling stations were added to the existing 45-station Radiation Surveillance Network; operation of this Federal-State activity was placed on a round-the-clock schedule. Sampling of milk, water, and food was increased to determine more specifically the amounts of radioactive materials likely to be ingested. The analytical laboratories went on double-shift operations when required in order to handle the increased work-load. Early in 1962, a third regional laboratory was opened at Winchester, Mass., to conduct radiochemical support activities for 15 northeastern States.

The Institutional Diet Sampling Program, initiated in 1960, was expanded. The purpose of this program is to secure an estimate of the total dietary intake of radionuclides by children and teenagers aged 5 to 18 years. In conjunction with this program, the Division contracted with Consumers Union of U.S.A., Inc. to sample teenage and infant diets in 30 cities for the presence of strontium 90 and other radionuclides.

In connection with the development of a Radiation Intelligence System, a pilot project was conducted during the summer of 1961 in Montgomery County, Md., to evaluate the effectiveness of household interviewing techniques in assessing radiation exposure to the population. The findings were sufficiently encouraging to warrant extension of the methodology on a national scale, utilizing the interview system of the Bureau of the Census.

The Division participated in a number of special long-term radiation safety projects during the year, including surveillance activities with Joint Task Force-8 in Hawaii and the Pacific testing area; medical and health physics support for the nuclear ship *Savannah* during its sea trial period; and off-site and on-site surveillance at *Savannah* ports-of-call.

STATE ASSISTANCE

A major step was taken to strengthen State radiological health programs with the approval by Congress of a system of matching grants to the States—\$1,500,000 for the first year.

Fifty professional staff members of the Division have been assigned to State health departments; some 25 more are being trained for early State assignments.

Through the Division's diagnostic X-ray inspection and correction program, more than 50,000 dental X-ray machines in some 45 States have been inspected, either by physical survey or the Surpak (mail survey) method. Work is in progress to adapt the Surpak technique for use in the inspection of medical X-ray machines.

RESEARCH

A number of long-term research projects were initiated to determine more accurately the genetic and somatic effects of low-level radiation.

A Radiological Health Animal Research Laboratory was established at Colorado State University, Fort Collins, Colo. At this facility, a large colony (2,000) dogs will be studied for their response to low-level radiation.

The development of a Registry of Radiation Pathology will further the knowledge of radiation effects through the study of morbid anatomy. The Registry has been established under the auspices of the Research Council of the National Academy of Sciences and is located in the Armed Forces Institute of Pathology.

Other projects of long-term significance include a tri-State study of congenital malformations, a joint study of radiation effects on primates, a nationwide bone sampling program for radio-strontium analysis, and a midwest environmental health study.

In addition to intramural and contract research, the Division completed its first full year of managing a system of extramural grants formerly funded by the National Institutes of Health. There are now 66 active grants funded by DRH in the amount of \$1,196,000.

TRAINING

For the second year, the Division provided grants to universities for the training of radiation health specialists. Congressional support of the program was increased to \$1 million in fiscal year 1962, enabling assistance to 20 schools.

The Division also stepped up its own training programs: short-course training was provided for more than 1,100 public health personnel in government and industry.

Division of Water Supply and Pollution Control

Since the turn of the century, while the national population has a little more than doubled, there has been an eightfold increase in water use. Present use of 325 billion gallons a day is expected to double by 1980 and triple by the year 2000. Wise management of the water resource has therefore assumed a position of number one social-economic importance. Prominently involved is the abatement, control, and prevention of pollution, for there is now nearly six times as much pollution in the Nation's surface waters as 60 years ago.

Since its beginning in 1948, this program has emphasized Federal-State-local cooperation under a declared policy to "recognize, preserve, and protect the primary responsibilities and rights of the States." The Water Pollution Control Act goes beyond the usual public health legislation, directing the conservation of "waters for public water supplies, propagation of fish and aquatic life and wildlife, recreational purposes, and agricultural, industrial, and other legitimate uses." Thus it assigns to the Department of Health, Education, and Welfare a major role in conservation and water resource development. During the first year under major amendments (July 1961) to the Federal Water Pollution Control Act the Division's program has nearly doubled in size and scope.

CONSTRUCTION GRANTS, PROGRAM GRANTS

As a result of increased funds for construction grants, fiscal 1962 set an all-time record with a 22 percent increase over the preceding year in municipal sewage treatment construction. Approved were 754 projects to which the Federal grants contributed \$65 million, and local governments \$332 million, a ratio of about 1-5. In the 6-year history of this grant program 3,500 awards totaling \$290 million have been made to support municipal funding of \$1.4 billion. All this will provide sewage treatment for 35 million people and improve water quality in over 38,000 miles of streams.

Despite this massive effort, there are still 5,290 U.S. communities of 43 million total population needing new, enlarged, or improved sewage treatment facilities.

Grant funds to State and interstate agencies, increased from \$3 million to \$5 million per year under the 1961 legislation, have enabled most of the States to expand their water pollution control programs. Stimulated by the grants, State funding has risen from \$4.2 million in 1956 (before grants) to \$7.6 million in 1961 (under the \$3 million authorization) to \$9 million in 1962 (under the \$5 million authorization). Water pollution control budgets of 33 States showed substantial increases in 1962 over 1961.

BASIC DATA

To maintain continuous intelligence on the nature and extent of pollution, the National Water Quality Network of major water-course sampling stations was enlarged from 91 to 121, with 300 as the ultimate goal. Thus are regular checks made on more than 15 physical and chemical parameters in water, including radioactivity, organic chemicals, coliform organisms, temperature, alkalinity, plankton, dissolved oxygen, and others. Experiments in electronic measuring and recording promise completely automatic network monitoring of waterways in the early future.

Continuing data are also collected, analyzed and published on water and waste treatment facilities and needs, on bond issues to finance these public works, on contracts awarded for the construction of such facilities, and on pollution-caused fish kills. Completed during the year was the first nationwide inventory of Federal establishments to determine the extent of pollution coming from them.

ENFORCEMENT

Five enforcement actions (two at request of the Governors of Washington and Michigan under the new intrastate provision of the Water Pollution Control Act) were initiated as follows: (1) Puget Sound, Wash.; (2) Detroit River, Mich.; (3) Raritan Bay, N.Y.-N.J.; (4) Mississippi River, Clinton Area, Iowa-Ill.; and (5) North Platte River, Nebr.-Wyo.

Additional conference sessions were held in pending cases: (1) the North Fork of Holston River, Va.-Tenn.; and (2) the Colorado River Basin, Ariz.-Calif.-Colo.-N. Mex.-Nev.-Utah-Wyo.

The three-step Federal enforcement procedure—conference, public hearing, and court action—has been initiated in 18 situations in the history of the program. In only one case has the third (court action) step of the enforcement procedure been necessary.

RESEARCH AND TRAINING

Research activities include both intramural projects at the Robert A. Taft Sanitary Engineering Center, Cincinnati, and extramural research projects supported by grants in some 80 universities and other institutions in about 40 States. Together they seek answers to problems in wastes origin; more efficient and economical characterization, treatment and disposal of wastes; improved methods in water quality measurement; and the supplementation and conservation of water supplies. A major project in advanced waste treatment to approach 100 percent purification of wastes, is continuing.

Research grants awarded during the year supported 159 projects totaling \$2.67 million, including 1 in support of the first international

conference on water pollution research scheduled for September 1962.

Newly implemented in fiscal 1962 were fellowships totaling \$98,000 to scientists and engineers at academic institutions in 16 States and 1 foreign country; 11 demonstration (applied research) grants totaling \$300,000 in 10 States; and 23 grants totaling \$693,000 to institutions in 13 States to establish or expand training programs in the field of water supply and pollution control.

Sites were selected for four of seven regional laboratory and research facilities authorized in 1961.

COMPREHENSIVE PROGRAMS, INTERAGENCY COORDINATION

Comprehensive water pollution control programs to protect and conserve water quality for all uses for a projected period of 50 years have been initiated or expanded in basins of the Columbia River, Great Lakes and Illinois Waterway, Susquehanna River and Chesapeake Bay, Delaware River, Ohio River, and Colorado River. In addition, field study projects on problems of national significance have been established with respect to the effects of pesticides on water quality and of recreational uses on water supply reservoirs.

Coordination of programs with other Federal water resource development agencies continued. Technical services under such interagency agreements represent a major and expanding activity. Of particular significance in Federal reservoir construction are requirements of the Water Supply Act of 1958 and of the 1961 amendments to the Water Pollution Control Act requiring, respectively, a determination of municipal and industrial water supply needs and stream flow regulation for quality control. Serving much the same as a consulting engineer, the Division has prepared reports for the Federal construction agencies on 97 projects, and has 209 others in progress or scheduled.

ADVISORY BOARD

The nine-member Presidentially appointed Water Pollution Control Advisory Board continued its policy of holding certain of its meetings outside of Washington to provide public forums to assess regional problems and progress in water pollution control.

The National Institutes of Health

National Institutes of Health continued to grow and reorganize as necessary to meet its expanding role in support of biomedical research. At the period's end, plans were completed for establishing the new Division of Research Facilities and Resources. Designed to centralize administration of some of NIH's major research support activities, the new Division will oversee programs for: health research facilities con-

struction, support for primate centers, general clinical research centers, special resources centers, and general research support grants.

In this period a new branch was set up in the Viruses and Cancer Program to help fulfill the broadened program for study of virus-cancer relationship, and the Cancer Chemotherapy National Service Center was reorganized to quicken the search for drugs useful in cancer treatment.

At the request of the President, legislation to convert the Division of General Medical Sciences to Institute status and to establish a new National Institute of Child Health and Human Development was introduced early in this period.

The new Institute—which would incorporate both the Center for Aging Research and the Center for Research in Child Health—would conduct and support research and training relating to child health and human development, particularly the special health problems of children and aged persons. Its research would cover the gamut of development and adaptation beginning with reproduction and terminating in old age.

Increased costs of large-scale clinical research facilities and enlarged manpower needs have caused a sharp upswing in expenditure per professional worker. Anticipated large-scale population studies; use of more complex, automated instrumentation; and expanding U.S. involvement in international medical research are expected to swell the requirements for highly skilled technicians and professionals. In the decade, 1960–70, it is expected that the existing pool of trained biomedical investigators will increase each year by 4,500, in contrast to the 3,500 annual increment in the 1954–60 interval.

To help achieve this goal, plans were made for a steady growth of training facilities, so that, by 1970, the medical research manpower pool would be doubled. Steps taken include:

- (1) Expansion of the pre-doctoral fellowship program to attract research students in the medical sciences.
- (2) Expansion of the medical student research program, which exposes selected undergraduate students to research.
- (3) Extension of the post-doctoral fellowship and graduate training programs to provide advanced training for research.
- (4) Provision of support to graduate schools.
- (5) Increase in training of foreign nationals in the United States and of U.S. citizens for research overseas.

Growth has now brought the training program to a point where a simpler mechanism is needed within NIH to help training institutions plan, finance, and conduct a more orderly program of science education. Such education must look to the long-range needs in medical research manpower: a large, strong group of medical and biologi-

cal scientists not limited in training to a specialized aspect of a disease problem, but so schooled as to be able to meet unpredictable problems.

Communicating results of research is, ultimately, a function of education and training. The continued growth of knowledge and technology requires incorporation of new findings into the educative scheme of the health sciences. NIH programs continue to have profound influence upon education and training in these sciences. More than half of the \$400 million in research grants made available during this period through NIH has gone to medical, dental, and other health professional schools of the country. In addition, NIH devoted over \$135 million to direct support of fellowships, training grants, and other training activities, many of which seek improvement in content of the undergraduate and graduate curricula and effective communication of current research information to health practitioners.

NIH maintained close liaison with the State Department in carrying out its research obligations under the International Health Research Act of 1960 (which for the first time explicitly established the authority of the Public Health Service to support research and related activities in foreign countries) and under Public Law 480 (which authorizes use of excess U.S.-owned foreign currencies for the mutual benefit of those countries and the United States).

Public Law 480 funds have thus far been made available in nine countries: Brazil, Burma, Egypt, India, Indonesia, Israel, Pakistan, Poland, and Yugoslavia. In these countries, NIH has developed a total of 58 proposals for collaborative research projects, covering an extensive range of pertinent subjects.

Since NIH's foreign program is primarily designed to improve health in the United States, any grant under this program must necessarily be of benefit to the United States as well as to the host country. The obligation to the latter, however, is a continuing one and NIH has been giving increasing attention to the effects of a grant on the medical research of a recipient country.

To facilitate more effective administration of foreign grants through increased mutual knowledge and understanding of the problems, NIH's Office of International Research established a small unit in Paris during this period, as an extension of the office of the Science Attaché housed within the American Embassy, and plans were being made for setting up two or three similar units in other countries.

Steady annual increases in support since 1946 have produced, as of the end of this reporting period, a research grants program of \$400 million, supporting more than 15,000 research projects conducted in almost 1,500 institutions throughout this country and abroad, and covering the full gamut of biomedical research. While the major portion of the program continues to aid investigations originating in

grantee institutions, a significant number of grants sustain programs (cancer chemotherapy, psychopharmacology, and other collaborative projects) which reflect initiative of NIH staff.

Careful review and reassessment have been undertaken of policy and operational procedures of the NIH extramural programs, which, for the past 5 years, have experienced unprecedented growth. The mutual dependence of Federal Government and Institutions of higher learning resulting from this growth necessitates examining the instruments—the grant and the contract—which have been the basis of their relationship.

The programs of the National Institutes of Health have utilized almost exclusively the grant as the basic means of providing support for research and research training activities carried out in universities and institutions of higher learning. Although it has been acknowledged that there are circumstances where a contract is preferable to a grant—as in sponsoring research by a profit-making organization—the grant will continue as the basic instrument for sponsoring research. A contract—in essence a procurement instrument—is a promise to deliver a specified product for a predetermined price. It makes a recipient of funds an agency of government, and thus subject to the full extent of restrictions that bear upon use of Federal funds by a Federal department and its agents.

A grant, on the other hand, is a conditional gift, a bestowal in response to a request, representing a mutual pursuit by grantor and grantee of a common objective. The grant establishes a relationship of trust; it imposes on grantor and grantee the obligation to act in the public interest. In accepting the grant, the grantee assumes the obligation to use the funds for their designated purpose and with the same probity and prudence with which that institution uses its own funds. It is under conditions of mutual trust and restraint made possible by a grant that scientific freedom can best be guaranteed.

Improved administration of grants and tighter control over monies granted (more detailed accounting and more precise audits) have been introduced with the purpose of furthering the quality and productivity of medical research, while maintaining freedom and flexibility for investigator and institution.

In this period, the Research Career Award Program was put into effect. Consisting of two groups—Research Career and Research Career Development Awards—the program is designed to assure younger as well as more mature investigators some measure of support early in their careers, thus permitting individuals of superior potential to reach their maximum productivity.

At the end of the period, there were a total of 50 General Clinical Research Centers. Authorized by Congress in 1960, the Centers pro-

vide a special setting for unrestricted but significant clinical investigation in medical schools and other medical research institutions, permitting precise controls and observations of the patient, his diet, therapy, and necessary tests and procedures.

Institute of Allergy and Infectious Diseases

This Institute is concerned with a formidable array of diseases, such as measles, asthma and hay fever, hepatitis, viral encephalitis, smallpox, streptococcal and staphylococcal infections, tuberculosis, poliomyelitis, rabies and others. Steady progress is being reported in every area, particularly in the field of upper respiratory infections, our most prevalent illnesses.

Due to accomplishments in clarifying the causes of respiratory diseases, the opportunity is now present to design protective vaccines. During the past year, the Vaccine Development Program was initiated. A number of contracts have now been awarded to non-Federal research groups experienced in developing and testing vaccines. This major collaborative effort to design vaccines against the widespread respiratory infections often grouped under the term "common cold" is also aimed at serious complications of colds, such as viral pneumonias.

One of the infectious organisms being employed in the experimental vaccines is the "Eaton agent," an important cause of pneumonias in children and adults. As a step toward culturing this formerly little-understood microbe for vaccines and for diagnosis of illness, Institute investigators collaborated with specialists at the Wistar Institute in Philadelphia and succeeded for the first time in growing it in cell-free media. They also resolved the question of the precise nature of this agent, previously thought to be a virus, by identifying it as a member of the obscure pleuropneumonia-like organisms group. This is the first "PPLO" linked with any human disease. The new finding provides the rationale for tetracycline therapy of the infection.

The Institute also has established a Viral Reference Reagents Program of wide import. It will provide standardized reagent materials which eventually will permit virus researchers throughout the world to recognize the viruses they isolate and compare their results.

The Institute continued its assessment of resistance of malaria strains to widely used drugs and participated in development of new antimalarials. Its scientists developed a sensitive and reliable blood test for observing antibody production in response to malaria infection. This may help identify previously undetected human reservoirs of the disease which afflicts hundreds of millions of people, imposing a heavy tribute on world health and economy.

Institute of Arthritis and Metabolic Diseases

One of the most significant and dramatic scientific accomplishments of the year—representing a major breakthrough in the chemistry of heredity—was the partial “cracking” of the so-called genetic code by Institute biochemists. This code involves the two hereditary chemicals, DNA and RNA, and provides the means by which living cells store and transmit genetic information. In collaboration with researchers from the University of California, these scientists have demonstrated that a universal genetic code may control the development of a variety of organisms. These findings, illuminating certain aspects of the systematic reproduction of all living matter, have attracted world-wide attention.

From continuing studies of rheumatoid arthritis it has become apparent that both immunologic and genetic aspects are involved in this crippling disease. During the past year, major emphasis has been given to the immunological mechanisms, particularly those relating to the so-called rheumatoid factors.

The rheumatoid factors are found in the blood of most rheumatoid arthritics, and recent studies of their source as well as their physical, chemical, and biological characteristics suggest they are large antibodies produced as a body defense against an altered type of gamma globulin in the blood.

Under continuing investigation are such aspects of the rheumatic diseases as genetic and environmental factors. Institute scientists making a family study of patients with Sjogren's syndrome, a disorder often accompanied by rheumatoid arthritis, have found that normal blood relatives of patients often have a variety of hidden or ignored signs of the disease, thus indicating a genetic predisposition.

Advances have also been made in management of the various forms of arthritis. Institute scientists have found, for example, that a high calcium diet may offset further “bone-thinning” that often occurs in patients treated with the corticosteroid hormones.

Striking progress was made in studies of gout, another of the rheumatic disorders. Scientists at the Institute were able to demonstrate that deposits of sodium urate crystals are the cause of the acute inflammation and painful and disabling attacks of gout. They have shown also that the painful symptoms of gout probably result from the metabolic activity of white blood cells in the inflamed joint, and that the familiar drug colchicine decreases the activity of these cells, and thus interrupts the gouty attack.

In diabetes research, one of the most promising advances of the year has been the development by grantees at the Joslin Clinic in Boston of special tests which can reveal the “pre-diabetic” patient

before he develops frank diabetes and is discovered through current tests.

Encouraging results have come from studies of several other serious but less known diseases including Wilson's disease, marked by accumulation of excess copper in the body; a newly-discovered metabolic disease, histidinemia, which may cause speech and hearing defects in some children; and an uncommon but serious form of blood disease occurring in newborn infants, which has been found to result from blood-platelet differences in mother and offspring.

The Institute has continued to extend its extramural research program in gastroenterology. Grantees at the University of Minnesota Medical School have been able to produce rapid healing of duodenal ulcers in a substantial number of patients by freezing stomach mucosa for short periods of time. Freezing is done by a subzero cooling liquid circulated through a balloon placed in the stomach. Further studies are needed, but the new technique may avoid the need for surgery in many duodenal ulcer cases. Another advance in the field of gastroenterology has been the development of a unique, flexible endoscope by a grantee at the University of Alabama Medical School. The device has a revolutionary optic system, employing fiber optics, which permits examination of gastrointestinal areas not previously accessible with conventional instruments.

Cancer Institute

There are, according to a new estimate, approximately 105 basic kinds of cancer, and each presents a somewhat different set of problems in research on causes, detection and diagnosis, and treatment. Accordingly, an increasing share of the research conducted and supported by the National Cancer Institute is focused on specific kinds of cancer and on the individual who has cancer.

During the year, the 25th since the establishment of the National Cancer Institute, its programs were strengthened to take maximum advantage of the resources provided by the Congress and to capitalize on the latest experimental and clinical findings. An effort was begun to coordinate and accelerate research on treatment of acute leukemia patients and on the relationship of viruses to leukemia. A contract-supported program set up to provide essential supplies and services for virus-cancer investigators moved rapidly toward full-scale operation. A series of steps was taken to increase the effectiveness of the nationwide cancer chemotherapy research program, which the National Cancer Institute administers. Experimental and epidemiological studies of potential cancer hazards in the environment were expanded. And finally, the investment in efforts to develop improved methods of diagnosing cancer was increased.

INSTITUTE RESEARCH

The advantages of orienting research toward specific kinds of cancer were exemplified by advances made in caring for patients with acute leukemia. Thanks to the work of scientists in many places, gradual progress has been made in drug treatment and supportive therapy, with the result that 50 percent of acute leukemia patients now live a year or more from diagnosis. The results of clinical research during the year raised the prospect of an additional increase.

The leading achievement was a reduction in the risks of fatal hemorrhage and infection, complications that often take the lives of acute leukemia patients before drug treatment has had time to take effect. Transfusions of pooled platelets from numerous donors proved highly effective in preventing and controlling hemorrhage.

Tests of two new drugs rang another hopeful note. One of them, vincristine, a periwinkle plant extract, showed promise in acute lymphocytic leukemia, the type that children usually have, and in lymphomas, such as Hodgkin's disease and lymphosarcoma.

The other new drug, a synthetic compound known as methyl-GAG (for methylglyoxal-bis-guanylhydrazone), though its side effects required careful attention, induced remissions of acute granulocytic leukemia more often than any drug previously available.

A promising approach to direct studies of the role of viruses in human leukemia materialized early in the year as a result of work with a virus-induced leukemia of mice and rats. An electron-microscope study provided the key by revealing virus particles in the blood of animals bearing the experimental leukemia. The same technique is now in use for studies of blood samples from acute leukemia patients.

Also in virus research, a new experimental leukemia virus was isolated that causes recognizable effects in mice in 7 days, thus making available a system potentially useful for rapid testing of new drugs.

There were also a number of noteworthy accomplishments in research on other aspects of cancer. The effects of a gene on normal growth and on the occurrence of liver tumors in mice of an inbred strain were eliminated by removing the pituitary gland from animals 1-to-2 months old. Thus, the mice were prevented from growing normally, and when they were 16 months old none had liver tumors, though 60 percent or more would ordinarily have had them at that age. Several other genes are also known to influence the occurrence of certain tumors in inbred mice in addition to governing the inheritance of normal characteristics. A broader understanding of these effects and of the role of normal growth processes in the genesis of cancer is being sought.

GRANT-SUPPORTED RESEARCH

A long-term investigation of the transmission of a virus that causes leukemia in chickens turned up evidence that chickens born with the virus, unlike those infected later in life, became tolerant of it; that is, they did not form antibodies to it. The virus survived and was reproduced in their bodies as long as they lived. The virus passed from hens to their offspring during pregnancy; roosters played no role. Chickens that were not born with the virus picked it up from those who were. Thus, the virus spread through an entire laboratory flock. Though few chickens developed leukemia, the incidence was six times as high in those born with the virus as in those infected by contact.

Evidence was obtained that virus-caused tumors can be reproduced with nucleic acid isolated from them even when they appear to contain little or no whole virus. This was one achievement in experiments with virus-induced tumors in rabbits. A similar approach is being used for human cancer studies at the National Cancer Institute and elsewhere. Also, an experimental vaccine was developed that increased the frequency with which virus-induced benign tumors in rabbits regressed instead of becoming malignant.

A monkey virus that contaminated some lots of polio vaccine and caused cancers when tested in newborn hamsters was found to cause abnormalities in adult human cells in tissue culture.

An abnormal chromosome, called the Philadelphia chromosome, previously seen in white cells from a few patients with chronic myelocytic leukemia, has been found in a high percentage of untreated patients. It disappears from the blood after treatment. That it is related to the genesis of leukemia has yet to be determined; no flow like it has been seen regularly in other types of leukemia, nor has the Philadelphia chromosome appeared in all cases of the chronic myelocytic type.

Encouraging preliminary results were achieved with two investigative methods of therapy for lung cancer, in which the prognosis has long been poor. Published reports on work with small numbers of patients indicated that high-voltage cobalt-60 radiation prior to surgery made operations possible in some cases originally deemed inoperable, and that combined radiation and treatment with a drug, AB-132, brought about marked regression of inoperable cancer. Both approaches are being studied in larger groups of patients.

New evidence that exposure of pregnant women to X-rays in diagnostic doses makes their children's risk of dying from cancer abnormally high came from a survey of births in 37 large hospitals from 1947 to 1954.

One of the year's outstanding accomplishments by a grantee won recognition from scientists everywhere for its significance in the understanding of one of the basic phenomena of life—the immune response, which helps protect man against disease and causes him to reject transplants of tissue from any donor except an identical twin.

Institute of Dental Research

Laboratory research reaffirmed previous findings that, as an infectious and transmissible disease, experimental dental decay is far more specific than has been realized, and is highly dependent on the critical interaction between host, diet, and microflora. Knowledge that dental decay could be induced in a strain of caries-inactive hamsters by oral inoculation of a specific strain of streptococcus opened the way for studies to determine the feasibility of vaccines for immunizing test animals against tooth decay. Although it would be premature at this time to apply any of these findings to humans, the Dental Institute plans to direct a major emphasis to clinical studies.

Studies of nutrition and dental caries emphasized changing concepts of the dietary etiology of dental caries. Focus on the necessity for calcium and the avoidance of sugar was widened to include such diet factors as the quantity and quality of protein, the role of lysine, and the cariogenicity of certain heat-processed food.

Gains were made in new knowledge of the submicroscopic structure, and physical and chemical properties of teeth. In research on periodontal disease, a better understanding of calculus formation was achieved through use of new techniques of germfree study, electron diffraction, and X-ray and electron microscopy.

Significant results of studies of hereditary conditions with oral manifestations included: description of a heretofore unrecognized hereditary disease (benign intra-epithelial dyskeratosis) affecting the conjunctiva and the soft tissues of the mouth; description of a new neurological condition inherited as a recessive trait which, in addition to causing spasticity and certain skin changes, also causes defects of speech and chewing; and clarification of mechanisms of abnormal oral development based on longitudinal twin studies and analysis of family data.

A new clinical program was launched in a multidisciplinary approach to physiological studies of laryngeal and pharyngeal anatomy and function in children, and cleft-palate patients with speech and feeding disorders.

GRANTS AND AWARDS

Basic studies bearing on periodontal disease with special emphasis on the physiology of occlusion and the responses of tooth-supporting

tissues to traumatic or other injurious influences are being pursued by grantees at Eastman Dental Dispensary, Rochester, N.Y. Grantees at the University of Kentucky Medical Center are studying chromosomal abnormalities as possible causes of a cleft palate in association with one or more unrelated physical defects, and the distribution of such genetic defects in families of children with cleft palate.

Increased grants were made to non-Federal institutions to train clinical and basic science personnel for research, and support was continued to dental schools for training undergraduate dental students to work with chairside assistants.

Heart Institute

In 1962, the attack on the complex of disorders of the heart and blood vessels was accelerated by strengthened programs of the National Heart Institute in support of research and training, and the aid provided, through its appropriation, for community programs.

In atherosclerosis, the complicated processes of fat metabolism were the focus of productive investigations, and cholesterol continued to receive much attention. Heart Institute studies have defined the probable sequence of steps involved in cholesterol synthesis and identified the intermediate products evolved; this basic knowledge has been of notable importance and current pertinence with relation to cholesterol-lowering drugs.

Recent findings in other basic studies suggest that the body may regulate its serum lipid levels through nerve, hormonal, or other mechanisms that affect triglyceride synthesis or breakdown, and that one of the most important regulatory factors may be glucose. Glucose appears to be essential to the synthesis of triglycerides, the form to which fatty acids absorbed from the circulation or synthesized from other substances are converted for storage in adipose tissue. Without glucose, triglycerides broken down to release their fatty acids to supply metabolic fuels could not be replaced.

In hypertension research, the study of amines received much attention since a number of these substances are powerful stimulants and blood-vessel constrictors, and several are thought to be involved in the mechanisms by which the body regulates blood pressure. One of these, norepinephrine, is of particular interest because it seems to be the key to the action of many drugs now used to treat hypertension.

Alpha methyl dopa is a new drug, still in the experimental stages, that appears to act by blocking the storage sites of norepinephrine at nerve terminals. Findings reported during the year suggest that the drug may have advantages over other blood-pressure-reducing agents.

Questions of toxicity and tolerance have not yet been completely answered, however.

Another experimental blood-pressure-lowering drug undergoing clinical tests is MO-911.

Among advances in diagnosis of heart attacks was the modification and improvement of precordial scanning as a simple and sensitive technique for detecting left-to-right shunts, one of the most frequently occurring signs of congenital heart disease. The technique has also been adapted to detect acquired valvular defects and for measuring heart output, although catheterization is required for these.

Findings from epidemiology studies further defined factors associated with an increased risk of developing coronary heart disease. Among these factors are an elevated serum-cholesterol level, elevated blood pressure, enlarged left ventricle, cigarette smoking, and low vital capacity. Accumulated data indicate that combinations of factors increase susceptibility, so that those at high risk can now be determined to some degree.

GRANT-SUPPORTED RESEARCH

Successful long-term use of implantable artificial cardiac pacemakers in patients with Stokes-Adams syndrome was reported by scientists at Harvard University and at the University of Minnesota. In this syndrome, the heart's conduction system—which originates and transmits the electrical impulses causing the heart to beat—is damaged by disease and partial or complete heart block may result. Regular heart rhythm can be restored with use of an artificial pacemaker, set at a pace suitable for normal activity, and then implanted under the skin to remain until its batteries require replacement in about five years.

A significant achievement was the development by investigators at Marquette University of instrumentation and techniques for accurately locating the heart's specialized conduction system during open heart operations.

Investigators at Jefferson Medical College reported that blood stored in acid-citrate-dextrose solution, the most widely used anticoagulant and preservative for banked blood, can be restored to a nearly normal biochemical state by a combination of anion and cation exchange resins.

Serum cholesterol levels can be reduced by thyroid hormones, but the doses needed to maintain low serum cholesterol also increase basal metabolic rate and may cause angina pain in heart patients. In doing studies at the University of Louisville it was found that several synthetic analogs, near relatives of thyroxine, appear able to hold serum cholesterol down without elevating basal metabolism in patients with normal thyroid function.

Angiotensin II, a blood-vessel constrictor that results from the action of a kidney enzyme called renin, has been suspected of playing an important role in essential hypertension, since blood angiotensin levels have been reported higher in patients with high blood pressure than in others. Findings from recent radioactive tracer studies by scientists at Mount Sinai Hospital, New York City, indicate that the metabolic inactivation of angiotensin proceeds more slowly in hypertensives than in normotensives, and may account for the higher concentrations found in hypertension.

Improved techniques for accurately locating clots and lesions obstructing coronary arteries and for preventing constriction of small blood vessels at the site of surgical incision have increased the safety and effectiveness of surgery to remove such atherosclerotic obstructions.

Impressive results continued to be reported by investigators at Baylor University and other institutions in surgical treatment of certain clots and atherosclerotic deposits that prevent an adequate supply of blood from reaching the brain.

Institute of Mental Health

Progress in the field of mental health has proceeded at an accelerated pace during recent years and important advances were made during the past year in the various Institute programs. The Institute's activities have included both those designed to develop more effective methods of treating mental and emotional disorders, and those which attempt to find ways of preventing such disorders.

The Institute's program was given impetus this year through the wide public interest aroused by *Action for Mental Health*, the Report of the Joint Commission on Mental Illness and Health. The Report, sharply focusing attention on needs in mental health and the promise for control of the mental disorders that lies in knowledge now at hand, has stimulated the initiation of new programs for action at community, State, and Federal levels. Its impact will increasingly be felt on mental health programs in the years ahead.

GRANT-SUPPORTED ACTIVITIES

The Institute's grant program is designed to support a complex variety of research programs, mental health projects and training activities—all ultimately aimed at the solutions of mental illness in its many forms.

More than a third of the grant program was concerned with the major psychosis, schizophrenia, which accounts for more than half of all patients hospitalized for mental disorders in the United States. Research covered a wide range of studies, including testing of prom-

ising therapeutic measures; the collection and analysis of trends in hospital populations, as well as programs for advanced training of personnel; and the development of hospital, clinic, and community services for diagnosis, treatment, and rehabilitation.

Over 18 percent of grant funds were directed to the important problems of mental retardation, juvenile delinquency, and other abnormal and behavioral problems.

Grant support in the area of alcoholism and drug addiction has made possible the relocation at Rutgers of the Center of Alcohol Studies, and such investigations as thyroid therapy for acute alcoholic stupor, studies on detection of problem drinkers among industrial employees, and programs for the rehabilitation of drug addicts.

The past year was a period of major development in the Institute's international research grant program, and a continuing expansion of this program is seen for the next several years.

The Psychopharmacology Service Center was engaged in stimulating and facilitating grant support of research in studies of drugs used in mental illness.

To facilitate dissemination of information on developments in psychopharmacology, an abstracting service was initiated. The publication, which provides coverage of world-wide current literature in this field, fills an important need in bringing together relevant information on drugs for the benefit of clinicians and scientists approaching the subject of psychopharmacology through many disciplines.

BASIC AND CLINICAL INTRAMURAL RESEARCH

Extensive research continued in the synthesis, degradation and distribution of the biogenic amines in the body and brain, in an effort to determine whether abnormalities in the metabolic processes may play some role in the etiology of mental illness, particularly schizophrenia.

The studies begun last year of factors affecting mobilization of free fatty acids (FFA) in schizophrenic and normal patients were extended. The results indicate that some schizophrenics do not exhibit a normal fall in FFA in response to insulin.

A major continuing project in the area of schizophrenia research is the study of families. NIMH investigators, for example, have found that the presence and variety of schizophrenic illness can be predicted from the form of thinking in the rest of the family in which the patient has developed. The findings suggest an environmentally determined rather than a gene-determined interpretation of schizophrenic thought disorder.

Testing the addiction liabilities of new narcotic drugs remains an important part of the Institute's research program at the Addiction

Research Center, Lexington, Ky. A search for analgesic compounds with effects differing from morphine has been the subject of intensive research at the Center in the past years. A new series of compounds, the indanes, has now become available. These indanes differ from agents previously studied in that they are analgesic in animals and in man.

The intermediate metabolism of psychoactive drugs, and the individual differences in their handling in the body, represents a principal research interest of the Institute's Clinical Neuropharmacology Research Center at St. Elizabeths Hospital, Washington, D.C.

COMMUNITY SERVICES AND PROGRAM DEVELOPMENT

The development of comprehensive community mental health programs was encouraged through grants-in-aid to the States, professional and technical assistance to States through consultation, surveys of special mental health problems, conferences, demonstration projects, and support of research projects designed to develop improved methods of diagnosis, care, treatment and rehabilitation of the mentally ill.

The Institute also extended its program development activities in special problem areas of significance for mental health—rehabilitation, aging, juvenile delinquency, mental retardation, suicide prevention, alcoholism, drug addiction, among others.

The Institute played a major role in activating a large demonstration project, Mobilization for Youth, designed to attack the problem of juvenile delinquency on the lower east side of Manhattan.

TRAINING

The Institute's training programs were widened this past year through increased support for psychiatric training of general practitioners, including both specialized residency training, and post-graduate education in psychiatry to enhance general practice skills.

Institute of Neurological Diseases and Blindness

To a decade of progress, observed by the Institute this year, may be added important gains in the Institute's programs toward increased prevention, control, and cure of disabling neurological and sensory disorders.

COLLABORATIVE PERINATAL RESEARCH

Useful and encouraging clues have begun to emerge from the Institute-supported mother-child study aimed at shedding light on the relationship between events of pregnancy, birth, and the first month of life, and the occurrence of brain-damaging disorders of infancy and childhood.

Analysis of information collected on 7,500 of the more than 25,000 pregnancy studies to date at the 15 collaborating medical centers has confirmed that expectant mothers who smoke are more likely to give birth to a premature infant than the nonsmoker. This finding is significant because prematurity is an important factor in brain damage and infant deaths.

Prematurity has also been linked to some symptomless infections in the expectant mother. This finding underscores the need for improved diagnosis and early treatment of maternal infections during pregnancy.

Special related studies conducted at some of the collaborating hospitals have also proved fruitful. For example, an Institute grantee developed a simple, inexpensive screening test which permits early detection of the brain-damaging but treatable disorder known as phenylketonuria, or PKU.

PRIMATE RESEARCH IN PUERTO RICO

The broad study of perinatal problems in humans is paralleled by studies of monkeys at Institute laboratories in Puerto Rico. Now in its sixth year of operation, the project has established conclusively that birth asphyxia causes brain damage resulting in syndromes resembling cerebral palsy and mental retardation in humans. Current research is aimed at developing means of prolonging survival of asphyxiated monkeys and preventing brain damage.

MULTIPLE SCLEROSIS, MUSCULAR AND NEUROMUSCULAR DISEASES, EPILEPSY

Further strides were made toward understanding the biochemical process by which myelin, the protective sheath around nerve fibers, is formed and is also caused to disintegrate. Observations of diseases in animals which have strikingly similar resemblances to multiple sclerosis support the theory that this and other disorders which rob nerve fibers of this protective sheath may be due to a latent viral agent. Also highly suspect as a possible cause is auto-immunization or sensitivity to certain substances normally occurring in brain tissue.

This year scientists identified a substance which induces an experimental disease in animals (allergic encephalomyelitis) as a small basic protein found in the nerve sheaths in the brain. Moreover, this same substance not only induced the disease but was utilized to suppress it as well. In similar studies of allergic encephalomyelitis in tissue culture, grantees helped demonstrate that an antibody-like factor in the blood of multiple sclerosis patients destroys myelin.

Developments in the intriguing field of immunology, especially in regard to auto-immune diseases, have also had an impact on neuromuscular research. Preliminary results reenforce earlier predictions

that myasthenia gravis might be an auto-immune disease. Grantees have determined that a constituent of serum, called serum complement, from myasthenic patients varies in concentration in relation to the severity of the symptoms. The constituent is involved in immune reactions of the blood.

Encouraging preliminary reports were made on the use of a new anticonvulsant drug, R594, in children with certain types of epilepsy previously resistant to drug therapy. In other studies of the clinical course and therapeutic evaluations, grantees have found brain-wave recordings to correspond to the type, degree and localization of seizure.

VISION, HEARING, HEADACHE

Research progress in the Institute's laboratories and at other research centers promises to aid in controlling and treating eye disorders which affect millions, especially older persons. In glaucoma, the second leading cause of blindness in the United States, Institute scientists identified an important enzyme in the fluid formation within the eye which causes increased pressure. This basic discovery is expected to pave the way to the clinical use of a new type of drug to inhibit formation of the excess fluid and prevent damage to eye tissue.

Last year an Institute trainee discovered a cure for herpes keratitis, or "winter pink eye," by applying an antiviral drug to the treatment of this common inflammatory eye disorder. The treatment rapidly cleared the acute inflammation without scarring the cornea. When the treatment is perfected, many people may be saved from blindness.

Outstanding basic research by an Institute grantee has established the mechanisms by which sounds received in the inner ear are conveyed to the brain. These findings make it possible to determine whether deafness is caused by damage to the ear or to the portion of the brain concerned with hearing.

To the countless sufferers from migraine headache, the release in 1962 of a research drug to physicians generally for prescription use brought hope that effective prevention was at hand. This drug was carefully checked by a "double-blind" technique by an Institute grantee and other specialists, and its minor side effects cautiously evaluated. Called methysergide maleate, the compound may not be used for all patients, but under medical guidance is proving helpful for many patients as a preventive.

Grantee findings that persons subject to migraine headaches had about twice the incidence of abnormal brain-wave patterns as other persons encouraged treatment with anticonvulsants. The reported results have been favorable in 80 percent of a highly selected group of cases.

Division of Biologics Standards

This Division is responsible for the administration of control measures for all biological products used for the prevention and cure of disease in man. These products—the vaccines, antitoxins, therapeutic serums, and human blood and its derivatives—are developed for the most part from potentially pathogenic microorganisms. Rigorous control procedures are essential in their preparation to reduce to a minimum the hazards which might occur in processing, and to ensure final products of satisfactory potency.

Effective administration of these responsibilities requires the design and development within a research context of adequate and practical standards for the production and testing of biologics, careful surveillance of production methods, and the continuous improvement of testing procedures. Thus, the varied research activities of the Division's six laboratories—Bacterial Products, Biophysics and Biochemistry, Blood and Blood Products, Control Activities, Viral Immunology, Virology and Rickettsiology—are essentially product-oriented. Their scope, direction, and intensity are dictated by the need to provide essential information for the formulation of requirements and regulations governing the licensing and release of biological products.

An appreciable part of the Division's research this year has been devoted to work on the adventitious simian virus, SV-40, found in some kidney-tissue cultures from which live and killed polio vaccines and adenovirus vaccine are prepared. Since, with few exceptions, the role of animal viruses in the production of human disease is unknown, their exclusion from all commercial vaccines is required by the Public Health Service. In addition to devising elaborate test systems for the detection of SV-40 during the processing of the vaccines, the Division is continuing to study the pathogenesis of the virus for man, monkeys, and other laboratory animals; the development of simpler tools for working with it; and the exploration of its ecology in monkeys in their native habitat as well as in the laboratory.

During the year, the solution of problems relating to the licensing of live poliovirus vaccine was of pressing urgency. This involved working out delicate testing methods to assure the genetic stability of the three virus strains, as well as developing techniques for detecting the presence of SV-40. These problems were satisfactorily resolved, and in March, Type 3 was licensed, thereby making available the complete series of oral vaccines for protection against all three types of polio.

The development this year of regulations for measles vaccines necessitated the formulation of an extensive array of controls covering three products—inactivated measles vaccine, live measles vaccine, and

standardized gammaglobulin. Concurrently, the Division is developing standard reference materials which will serve to correlate laboratory results so that the potency of the vaccines produced by individual manufacturers can be evaluated on a sound common basis.

Throughout the year, the Division's Laboratory of Blood and Blood Products carried on an extensive investigation of alleged violations of the Biologics Law in the sale of plasma and whole blood. The evidence, involving the updating of whole blood and the processing of plasma for sale without license, was turned over to the U.S. Department of Justice.

At the close of the fiscal year, 288 biological products were licensed under the provisions of the Public Health Service Act for commercial use in this country and abroad.

Division of General Medical Sciences

The primary responsibility of this Division is the administration of NIH grant and fellowship programs for research and training in the sciences basic to medicine and biology and in certain clinical areas which encompass or cut across categorical Institute programs. It administers certain other grant programs also, and the NIH centers for Aging Research and for Research in Child Health.

RESEARCH GRANTS

Grant-supported research has indicated that the genes of all living vertebrates may have a common evolutionary origin, so that deviation in the molecular structure of a gene actually constitutes a kind of "molecular disease." This approach to genetics may lead to practical methods of fighting diseases which originate in the germ plasm.

The hitherto mysterious role of the thymus gland is being analyzed. This has bearing on such varied things as skin grafts and growth. Here is a new approach to transplantation of organs as well as to stimulating healthful growth and inhibiting harmful growth.

Four different patterns of defective bilirubin metabolism have been described in jaundiced premature infants, and these have been tied to the patterns for recovery.

RESEARCH TRAINING GRANTS

Grant funds have been made available to research institutions to extend and improve graduate research training. Fellowships at various levels have been awarded to promising scientists and teachers. The Division is providing training aid in 20 different basic fields and for 596 separate programs.

THE GENERAL CLINICAL RESEARCH CENTERS

This period has seen the emergence of the General Clinical Research Center as a genuine research tool. By the end of the 1962 fiscal year,

56 awards had been made and 25 centers were open for patients. In addition to general centers for study of metabolic diseases, nutritional ailments, surgical conditions and other problems in adults, centers have been established for study of children's diseases and even for the special study of prematurity.

Reports from the basic scientists and physicians associated in the Centers indicate new leads in muscular dystrophy; knowledge of a new inborn error of metabolism; a new method for the use of a transistorized pacemaker for cardiac stimulation, a technique for utilizing the artificial kidney on a regular basis over a period of years, and a method for the determination of the life span of human blood platelets.

CENTER FOR RESEARCH IN CHILD HEALTH

In 1961, a Center for Research in Child Health—designed to achieve greater understanding of the pattern of human life and development—was established in the Division. The Center will be a focal point for research in health problems of childhood and adolescence, infant mortality, mental retardation, congenital abnormalities, and other conditions which primarily afflict children.

CENTER FOR AGING RESEARCH

The Center for Aging Research has encouraged research programs in the field of aging through the Division of General Medical Sciences and the Institutes, and has also provided a central clearing house for research information in the entire field of aging.

Grants for research in aging continue to increase, now constituting some 300 projects.

GENERAL RESEARCH SUPPORT GRANTS

General research support grants provided stable allotments to a substantial number of medical research institutions for developing and maintaining well-balanced programs of general research and research training. These broad institutional grants can be used with great flexibility within the research framework and within prescribed objectives to provide resources and personnel for new projects.

SPECIAL RESOURCE CENTERS

Research facilities of a highly complex type which can be used for several colleges or several departments within a parent institution constitute Special Resource Centers. If, for example, a university has dozens of projects which would benefit from the presence of a computer center, a special research resource facility for this can be established with grant funds. Such centers are designed to facilitate the many varying aspects of research, in broad scope or fine detail.

Division of Research Grants

The Division of Research Grants continued to administer and coordinate the grant and award program of the National Institutes of Health, and to provide both technical assistance and review and appraisal services for the other grant awarding units of the Public Health Service. Functions included processing and scientific or technical review of grant applications, and the providing of fiscal, statistical, and information services.

In response to the mounting volume of applications for grants, the number of study sections—whose primary function is technical review of applications—was increased from 40 to 45.

During the year the Division undertook to improve financial management of grants through the strengthening of its policies and the coordination and streamlining of accounting procedures to be followed by investigators and budget officers in grantee institutions.

A major contribution to medical and scientific communication was the Division's first issue of an annual subject-matter index of active PHS research grants.

A new "Grants Associate" program, designed to recruit and train professional staff for Institute and Division grants branches and for DRG, was established.

The Division published a survey of the current professional status and geographic distribution of 2,917 former PHS fellows. The survey showed that approximately 87 percent of former fellows remain engaged in some research activity, and that approximately 67 percent spend some time in teaching.

Division of Research Services

The NIH research investigator looks to the Division of Research Services as a central source for biomedical computing and data-processing services; for studies of environmental conditions having a bearing on his work; for planning and consultation on laboratory and structural design; for noncommercial scientific instruments, fabrication of necessary equipment, and plans for laboratory automation; for supplies of laboratory animals, glassware, and media; for visual documentation of research findings by means of exhibits, motion pictures, and other aids; and for central and satellite library services.

Pioneering work in germfree technology begun by the Division in 1954 led to the establishment of germfree laboratories in three of the Institutes. Most recently, in anticipation of the time when scientists will demand genetically defined animals, the Division has established foundation breeding colonies leading to the routine issuance of germ-free and specific pathogen-free animals.

The NIH Animal Center at Poolesville, Md., is slated to become a model installation. The present schedule calls for completion of a farm animal building, kennel building, power plant, roadways, fencing, and utilities in 1964.

Far-ranging improvements leading to increasingly useful library and bibliographic services are under way. Satellite libraries have been inaugurated to serve the specialized information needs of geographically distant groups.

An ad hoc steering committee is studying the long-term needs of the Institutes for computer systems and data processing. The high-speed digital computer acquired in 1961 was operating near the two-shift level at the end of the fiscal year, with an almost equal balance between research, extramural, administrative, and epidemiological program applications.

Clinical Center

To meet the demand on all central services stimulated by an increase of 1,500-bed days over its predicted 75 percent utilization of available bed days, the Clinical Center, in this period, introduced automation and expanded services wherever feasible.

Clinical Center staff, collaborating with NHI and NINDB staff, expended much effort on preparations for the opening of the new surgical wing, scheduled for late fiscal year 1963. This unique facility will offer opportunities to observe parameters of surgery to a degree never before possible.

The Clinical Pathology Department, by adapting advanced research laboratory techniques and developing standards of precision, not only provided services crucial to the research patient's welfare, but also aided the entire field of medical diagnosis. The use and further development of automatic data computers illustrate the Pathology Department's techniques for solving the problems stemming from the large number of laboratory tests now available to the clinical investigator.

Table 1.—Statement of appropriations, authorizations, and obligations, Public Health Service, fiscal year 1962

[In thousands]

Appropriations	Funds available for obligation				Total funds available	Amounts obligated
	Appropriations and authorizations	Net transfers between appropriations	Repayments for services	Prior year unobligated balances		
Total.....	\$1,392,485	0	\$71,985	\$159,478	\$1,633,437	\$1,323,267
Appropriations, PHS.....	1,391,977	0	71,985	159,197	1,623,159	1,314,311
Buildings and facilities.....	18,230			5,027	23,257	2,171
Accident prevention.....	3,616		31		3,647	3,574
Chronic diseases and health of the aged.....	10,955	\$2,000	74		13,029	10,585
Communicable disease activities (1962).....	9,988		1,030		11,018	10,956
Communicable disease activities (1961 and 1962).....				892	892	747
Community health practice and research.....	24,331	-2,000	16		22,347	21,958
Control of tuberculosis.....	6,493		9		6,502	6,463
Control of venereal diseases.....	6,000				6,000	5,985
Dental services and resources.....	2,500	-100			2,400	2,293
Nursing services and resources.....	7,673	-32	4		7,645	7,553
Hospital construction activities (1962).....	1,772				1,772	1,766
Hospital construction activities (1962-63).....	209,728				209,728	62,849
Hospital construction activities (1961-62).....				124,515	124,515	124,423
Air pollution.....	8,590		7		8,597	8,283
Milk, food, interstate, and community sanitation.....	7,422		235		7,657	7,595
Occupational health.....	3,970		16		3,986	3,930
Radiological health.....	10,502	-20	829		11,311	11,230
Water supply and water pollution control.....	20,304	-34	505		20,775	19,383
Grants for waste treatment works construction.....	80,645				80,645	57,996
Grants for waste treatment works construction (1960-62).....				1,101	1,101	1,098
Grants for waste treatment works construction (1961-62).....				6,507	6,507	6,507
Hospitals and medical care.....	150,009		6,574		56,583	56,875
Foreign quarantine activities (1962).....	6,082	-734	376		5,724	5,641
Foreign quarantine activities (1962-63).....		734			734	563
Construction of Indian health facilities.....	8,285			4,498	12,783	7,018
General research and services, NIH.....	127,589				127,589	118,157
National Cancer Institute (1962).....	142,738			26	142,764	117,660
National Cancer Institute (1961-63).....				692	692	385
Mental health activities.....	108,838		72		108,910	108,084
National Heart Institute (1962).....	131,862		18		131,880	110,867
National Heart Institute (1962-63).....	1,000				1,000	
National Institute of Dental Research.....	17,335				17,335	15,103
Arthritis and metabolic diseases activities.....	81,802		391		82,193	79,318
Allergy and infectious diseases activities (1962).....	56,074	-750	12		55,336	54,013
Allergy and infectious diseases activities (1962-63).....		750			750	658
Neurology and blindness activities.....	70,762		1		70,763	62,987
Grants for cancer research facilities.....	5,000				5,000	5,000
Grants for construction of health research facilities.....	30,000			16	30,016	30,011
Scientific activities overseas (special foreign currency program).....	9,000			3,679	12,679	3,915
National health statistics.....	4,642		171		4,813	4,658
Operations, National Library of Medicine.....	2,066		14		2,080	1,870
Retired pay of commissioned officers.....	2,360				2,360	2,360
Salaries and expenses, Office of the Surgeon General.....	5,374	186	323		5,883	5,789
Construction of mental health, neurology research facility.....				12,128	12,128	406

¹ Supplemental appropriation bill pending.² Does not include \$17,000 to be deappropriated.

Table 1.—Statement of appropriations, authorizations, and obligations, Public Health Service, fiscal year 1962—Continued

[In thousands]

Appropriations	Funds available for obligation				Total funds available	Amounts obligated
	Appropriations and authorizations	Net transfers between appropriations	Repayments for services	Prior year unobligated balances		
Indian health activities.....	\$53,007		\$901		\$53,908	\$53,596
Hospital and medical facility research.....	10,000				10,000	8,104
Bureau of State Services management fund.....			5,026		5,026	5,005
National Institutes of Health management fund.....			34,613		34,613	33,734
General research support grants, NIH.....			20,000		20,000	20,000
Civil defense medical stockpile activities.....	35,433				35,433	24,507
Consolidated working fund, HEW, grants for research.....			199	\$116	315	165
Consolidated working fund, HEW, PHS.....			538		538	517
Appropriations, special project funds made available by other agencies.....					9,489	8,489
Salaries and expenses, Bureau of Prisons (transfer to HEW, PHS).....					2,457	2,455
American Sections, International Commissions, State (transfer to HEW, PHS).....					93	90
Salaries and expenses, Office of Emergency Planning (transfer to HEW, PHS).....					115	114
Research and development, Office of Emergency Planning (transfer to HEW, PHS).....					3	
Civil Defense, Department of Defense (transfer to HEW, PHS).....					1	
Farm labor supply revolving fund, Bureau of Employment Security (transfer to HEW, PHS).....					430	410
Inter American social economic program (transfer to HEW).....					588	487
Civil defense and defense mobilization, functions of federal agencies, Office of Emergency Planning (transfer to HEW, Office of Secretary).....					502	501
Administrative expenses, economic assistance, Executive (transfer to HEW).....					39	38
Development grants, economic assistance, Executive (transfer to HEW).....					3,709	3,003
Supporting assistance, economic assistance, Executive (transfer to HEW).....					580	432
Contingency fund, economic assistance, Executive (transfer to HEW).....					405	400
Military assistance, Executive (transfer to HEW).....					51	51
Consolidated working fund, DHEW, Office of the Secretary.....					516	508
Gift funds donated for general and specific purposes.....	508.2			281.5	789.7	467.0
Contributions, Indian health facilities.....	288.9			178.5	467.4	283.2
Public Health service unconditional gift fund.....	35.3			30.8	66.1	25.9
Public Health service conditional gift fund.....	10.9			10.9	21.8	12.1
Patients' benefit fund, Public Health services hospitals.....	40.0			19.1	59.1	43.3
Special statistical work, vital statistics.....	133.1			42.2	175.3	102.5

^a Includes \$432,000 contract authorization, and excludes \$435,000 liquidation of prior contract authorization.

Community Health

Division of Accident Prevention.....	167	166	166	93	73	2	1	1	1
Division of Chronic Diseases.....	631	601	599	327	272	24	30	24	6
Communicable Disease Center.....	2,058	1,997	1,986	97	1,886	14	61	11	50
Division of Community Health Services.....	204	203	137	137	66	1	1	1	1
Division of Dental Public Health and Resources.....	276	188	188	115	276	1	88	51	37
Division of Hospital and Medical Facilities.....	186	185	185	118	73	1	1	1	1
Division of Nursing.....	87	87	87	63	24	1	1	1	1
Details to other agencies.....	5	5	5	2	3	1	1	1	1
Environmental Health									
Division of Air Pollution.....	360	352	352	83	269	1	8	1	7
Division of Environmental Engineering and Food Protection.....	271	266	266	88	178	2	5	2	3
Division of Occupational Health.....	176	176	176	45	131	1	22	2	20
Division of Radiological Health.....	796	774	765	353	412	8	46	37	9
Division of Water Supply and Pollution Control.....	965	919	919	189	730	1	1	1	1
Details to other agencies.....	5	5	5	3	2	1	1	1	1
National Institutes of Health									
Office of the Director.....	10,053	9,664	9,532	8,954	578	97	389	138	251
National Cancer Institute.....	1,213	1,194	1,187	1,186	1	1	19	2	17
National Heart Institute.....	1,266	1,220	1,217	1,091	126	1	46	23	23
National Institute of Allergy and Infectious Diseases.....	624	597	592	471	121	3	27	11	16
National Institute of Arthritis and Metabolic Diseases.....	657	651	608	427	181	36	6	2	4
National Institute of Dental Research.....	599	550	543	541	2	1	49	38	11
National Institute of Mental Health.....	241	234	233	230	3	1	7	6	1
National Institute of Neurological Diseases and Blindness.....	1,035	942	939	802	137	3	93	31	62
Clinical Center.....	612	580	518	513	5	61	32	20	12
Division of Biologics Standards.....	1,658	1,606	1,606	1,606	52	11	52	20	52
Division of Research Grants.....	269	269	269	269	1	1	1	1	1
Division of Research Services.....	562	536	536	536	26	1	26	1	25
Division of General Medical Sciences.....	1,229	1,205	1,205	1,203	2	1	24	4	24
Details to other agencies.....	143	135	135	135	8	1	8	4	4
National Library of Medicine									
.....	216	213	213	212	1	1	3	1	2

Table 3.—PHS total paid employment by Bureau, commissioned officers, and civil service, as of June 30, 1962

Grand total	Commissioned officers				Civil service			
	Total	United States		Territories, possessions, and foreign countries	Total	United States		Territories, possessions, and foreign countries
		Total	Washing- ton metro- politan area			Total	Washing- ton metro- politan area	
Public Health Service—Total	32,638	4,501	4,363	1,407	2,956	138	28,137	233
Office of the Surgeon General	1,286	190	1,096	85	21	84	1,095	15,454
Bureau of Medical Services	14,368	1,862	1,845	92	1,753	17	12,505	11,119
Bureau of State Services	6,715	1,416	1,402	349	1,053	14	12,402	10,972
National Institutes of Health	10,053	1,031	1,008	880	128	23	5,299	3,693
National Library of Medicine	216	2	2	1	1	—	8,911	8,570
						214	214	—

Table 4.—Research grants and awards, fiscal year 1962

Program	Research projects		Research facilities		Fellowships				Training projects		Traineeships		Total	
	Num-ber	Amount	Num-ber	Amount	Full-time		Part-time		Num-ber	Amount	Num-ber	Amount	Num-ber	Amount
					Num-ber	Amount	Num-ber	Amount						
Total	15, 088	\$73, 175, 879	112	\$26, 759, 841	3, 736	\$26, 780, 145	20	\$12, 960	3, 348	\$115, 245, 835	323	\$2, 825, 839	22, 627	\$554, 800, 499
Allergy and infectious diseases	1, 804	33, 965, 083			193	1, 805, 908			170	5, 633, 481			2, 167	41, 404, 472
Arthritis and metabolic diseases	2, 756	53, 103, 397			142	1, 747, 729			332	9, 556, 342			3, 284	64, 779, 162
Cancer	1, 923	47, 646, 982			243	2, 138, 793			220	6, 932, 163			2, 399	61, 005, 021
Dental research	1, 412	6, 591, 614	13	4, 887, 081	101	2, 810, 075			158	4, 039, 818	54	371, 694	2, 671	11, 441, 807
General medical sciences	2, 366	85, 617, 614			1, 724	10, 866, 193	20	12, 960	686	30, 251, 002			4, 796	126, 747, 769
Heart	2, 694	69, 405, 141			1, 490	4, 399, 490			377	11, 493, 113			3, 471	85, 288, 744
Mental health	1, 724	40, 481, 055			718	3, 785, 940			1, 145	39, 374, 975			3, 487	83, 641, 970
Neurological diseases and blindness	1, 499	36, 363, 993			125	1, 226, 017			260	7, 964, 839			2, 153	48, 009, 094
Health research facilities, Division of Research Grants			99	31, 872, 760									99	31, 872, 760

Table 5.—Payments to States or localities within States for public health services, fiscal year 1962¹

[In thousands of dollars]

State	Venereal disease special projects	Tubercu- losis control	General health	Mental health	Cancer control	Heart disease control	Water pollution control	Chronic diseases and health of the aged	Hospital and medical facilities construction	Waste treatment works construction
Totals.....	\$ 2,569	\$3,499	\$ 14,920	\$6,622	\$3,389	\$4,598	\$ 4,340	\$ 4,859	\$164,384	\$42,103
Alabama.....	40	80	398	125	77	117	97	115	3,265	1,220
Alaska.....	1	17	41	52	-----	4	16	-----	636	74
Arizona.....	17	45	132	50	25	78	36	17	1,540	427
Arkansas.....	75	53	256	58	44	275	63	62	4,031	870
California.....	107	252	989	465	240	275	268	356	7,004	1,786
Colorado.....	3	29	163	66	34	69	44	52	1,750	762
Connecticut.....	11	34	134	73	36	61	76	38	664	656
Delaware.....	11	15	27	66	26	28	48	40	639	379
District of Columbia.....	71	33	42	67	26	47	38	40	605	117
Florida.....	106	83	417	164	84	125	107	169	5,458	1,022
Georgia.....	284	76	433	145	84	126	109	47	5,800	1,264
Hawaii.....	1	19	56	67	26	44	36	40	695	331
Idaho.....	1	14	91	67	26	51	26	40	998	616
Illinois.....	218	197	611	298	155	169	149	254	4,895	1,624
Indiana.....	-----	65	349	144	77	113	112	53	3,160	1,101
Iowa.....	8	32	251	80	29	47	63	45	3,466	572
Kansas.....	15	28	196	73	44	59	55	81	2,574	795
Kentucky.....	40	87	302	112	61	99	88	89	4,117	1,091
Louisiana.....	67	71	337	118	67	111	89	43	2,271	1,315
Maine.....	-----	20	100	66	9	16	37	23	1,103	1,167
Maryland.....	35	74	222	98	52	89	89	73	2,999	611
Massachusetts.....	-----	86	349	149	95	120	135	135	3,180	1,004
Michigan.....	59	131	518	246	127	162	171	198	4,966	1,408
Minnesota.....	1	40	298	104	65	78	82	121	3,329	976
Mississippi.....	31	53	340	93	63	113	81	122	4,695	865
Missouri.....	43	82	351	141	85	118	52	153	4,315	633
Montana.....	7	18	82	67	21	30	24	23	801	434
Nebraska.....	13	20	148	66	31	13	28	20	1,277	341
Nevada.....	8	12	47	47	5	11	11	25	681	484
New Hampshire.....	-----	13	57	65	25	19	33	-----	1,254	1,175

New Jersey.....	67	96	370	184	100	122	145	144	2,834	1,008
New Mexico.....	35	30	117	67	26	57	30	40	1,514	805
New York.....	532	330	945	504	273	283	306	418	9,533	1,587
North Carolina.....	114	75	520	171	97	124	133	108	5,946	1,170
North Dakota.....	11	15	94	67	26	51	26	40	1,473	846
Ohio.....	9	153	661	304	161	197	208	262	5,745	1,287
Oklahoma.....	19	45	238	79	51	86	59	93	2,458	1,109
Oregon.....	6	30	148	66	25	35	46	22	1,685	773
Pennsylvania.....	117	214	823	362	206	226	240	340	8,484	2,503
Rhode Island.....	2	19	64	65	26	49	61	40	948	2,142
South Carolina.....	83	51	303	94	57	108	82	73	4,783	415
South Dakota.....	9	13	100	65	9	12	27	15	1,499	180
Tennessee.....	87	91	391	133	74	127	103	58	4,882	1,134
Texas.....	142	154	816	323	175	235	192	209	10,646	1,264
Utah.....	142	13	106	39	6	9	18	312	312	882
Vermont.....	46	14	54	67	26	14	26	33	417	403
Virginia.....	4	80	330	135	72	76	98	100	6,737	643
Washington.....	19	45	202	91	47	79	64	62	1,751	792
West Virginia.....	19	45	190	67	41	65	59	68	1,711	481
Wisconsin.....	19	49	310	128	74	103	97	105	3,992	824
Wyoming.....	10	10	54	24	7	14	18	33	274	289
Guam.....	33	9	11	29	6	6	6	50	4,727	496
Puerto Rico.....	6	130	335	96	60	117	28	12	45	---
Virgin Islands.....	6	8	8	29	5	10	5	---	---	---

¹ Additional amounts as follows were paid during fiscal year 1962: \$1,943,000 for the Public Health Service traineeship program, \$6,466,000 for the professional nurse traineeship program, \$1,089,000 to schools of public health for the provision of public health training, \$1,097,000 for project grants for graduate training in public health, \$380,000 for the Public Health Service air pollution training and demonstration program, \$502,000 for project grants for training in radiological health, \$386,000 for the Cuban refugee health program, \$1,486,000 for community cancer demonstration and training projects, including \$56,000 for personal services in lieu of cash; \$491,000 for tuberculosis control projects and \$5,000 furnished in lieu of cash; \$116,000 for Water Pollution Demonstration Projects, \$310,000 for community health demonstration projects, \$3,192,000 for Alaska psychiatric hospital.

² Includes \$974,000 in services and supplies furnished in lieu of cash.
³ Includes \$6,000 withheld to cover assignment of commissioned officers in lieu of cash.

⁴ Excludes \$252,000 paid to water pollution interstate agencies as follows: \$12,000 to New England Interstate Water Pollution Control Commission, \$112,000 to Ohio River Valley Water Sanitation Commission, \$42,000 to Interstate Commission on the Delaware River Basin, \$59,000 to Interstate Sanitation Commission, \$27,000 to Interstate Commission on the Potomac River Basin.

⁵ Includes \$4,000 withheld to cover assignment of commissioned officer in lieu of cash.

Table 3.—*Prevalence of Diabetes in Population within States for Public Health Services, April 1957*
(By population groups)

State	White	Black	Hispanic	Other	Total	Male	Female	Total
Alabama	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
Alaska	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
Arizona	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
Arkansas	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
California	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
Colorado	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
Connecticut	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
Delaware	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
District of Columbia	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
Florida	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
Georgia	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
Idaho	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
Illinois	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
Indiana	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
Iowa	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
Kansas	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
Kentucky	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
Louisiana	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
Maine	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
Maryland	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
Massachusetts	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
Michigan	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
Minnesota	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
Mississippi	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
Missouri	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
Montana	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
Nebraska	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
Nevada	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
New Hampshire	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
New Jersey	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
New Mexico	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
New York	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
North Carolina	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
North Dakota	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
Ohio	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
Oklahoma	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
Oregon	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
Pennsylvania	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
Rhode Island	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
South Carolina	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
South Dakota	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
Tennessee	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
Texas	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
Utah	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
Vermont	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
Virginia	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
Washington	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
West Virginia	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
Wisconsin	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
Wyoming	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1

Office of Education

Highlights of the Year's Activities

In 1962 the Office of Education recast its program and structure to increase its effectiveness for helping achieve excellence in education. The redirection has been focused on these principal concerns—that the highest quality educational program of which our Nation is capable be assured through all possible avenues, and that opportunities for desired education be extended to all the people.

Recognizing the need for trained technical manpower, the high level of unemployment among youth who leave school early, and the nationally pressing need for expanding and improving training opportunities for youth and adults, the Office of Education initiated a reassessment of existing vocational education programs with a view to their adaptation to the needs of the coming decade.

Following the pattern of successful programs in science and foreign languages, the Office of Education embarked on a project for the improvement of quality in the teaching of English. The combination of curriculum development and improved instructional practice is the objective of the project. The Office also planned a similar program in the social studies and surveyed means by which it might strengthen education in the arts.

Project English provides an illustration of the more effective coordination of Office and extramural resources. A broad approach to the problem of teaching English has been initiated with specialists of the Office in English, research, and administration working closely together. In this project, instruction at all levels is being considered through study, research, and demonstration in curriculum development and instructional technique. Research contracts in colleges and universities are coordinated with the Office staff work. The multilat-

eral approach in the Office has accelerated similar types of cooperation among professors of English, education, and other disciplines within the participating institutions.

The Office turned its attention also to the relationship of educational and social problems, such as those of education for expanding urban areas and adult literacy. It conducted a comprehensive review of current grant and contract programs in order to assure that they are supporting equal educational opportunity for all, and began to stimulate research and studies related to problems of desegregation, education of migrant children, the disadvantaged, and culturally different youth. It brought together responsible leaders to consider the need for educating the American people more effectively for the attainment of the goals of a free society, and the ways in which American ideals might be given better expression in education.

As the Federal interest in education has grown, so has the variety of programs and the number of departments and agencies responsible for their operation. Because of its concern that educational institutions be continually strengthened as they participate in Federal programs, the Office of Education laid the foundation for a pattern of relationships with Federal agencies for the purpose of promoting a more coherent Federal educational policy and better coordination of the educational activities of these agencies. This concern with the effects of Federal programs was included in a special study of the Federal Government and higher education, two parts of which were completed during the year.

These new directions have been accompanied by a change in the Office structure. The organization of the Office, which had largely reflected the levels of education or major grant-in-aid legislation, was revised with the formation of three bureaus concerned with: (a) educational research and development encompassing all levels of education; (b) financial assistance program administration; and (c) international education program administration. This bureau structure will enhance the ability of the Office to concentrate its resources more effectively for the solution of major problems that cut across educational levels. It will promote more uniform administration of financial assistance programs and thereby ease the administrative tasks of the State and local education agencies. It will assure more effective coordination of Office activities in the support of the overseas programs of the Federal Government.

The reshaping of Office activities has sharpened the accomplishments of the programs with which the Office has been entrusted over the years. Among the latter are financial assistance to improve the quality of education in specialized fields, as in vocational education, mathematics, science and foreign languages; administration of

financial aid to students in institutions of higher education; consultative service on a wide range of educational matters; the collection and dissemination of statistics describing the condition of American education, its needs and accomplishments; the advancement of fundamental research for the progress of education; the administration of the large and intricate program of assistance to the Nation's schools in federally impacted areas. These programs constitute the most substantial portion of the responsibilities placed upon the Office of Education. They are avenues through which the Federal Government contributes to a strengthening of the leadership as well as of the educational programs of the State and local education agencies and institutions of higher education.

The Office of Education has a responsibility to view from a national perspective the large educational needs that affect the Nation as a whole—the regions, the States, and the communities. It has a responsibility to report such needs and recast its efforts to assist in fulfilling these needs. In 1962, the Office initiated new programs that focused, as its continuing activities focus, on support and supplementation of State, local, and institutional efforts. It has done so with the constant concern that the pluralistic structure of American education be judiciously preserved and strengthened.

Social Problems and Education

PROBLEMS OF URBAN AREAS

As the result of a social and economic revolution leading to urbanization, almost two-thirds of the people of the United States are concentrated in 212 metropolitan areas. This upheaval of home and family and social organization has, of course, brought great problems to the cities. They are problems of education, health, and housing; of sanitation and transportation; of social adjustment and employment; of delinquency and crime. To an extent greater than in the past, the Office of Education is widening its field of vision to recognize more clearly the effects of social-demographic problems on education.

The changing nature of urban centers is a source of many problems in education. One of the problems has been that of coping with the educational needs and opportunities created by Federal action in such areas as public welfare, public housing, urban renewal, and freeway construction. In December 1961 a group of educators met with the Commissioner of Education to discuss the impact of Federal programs on education, and their meeting led to the May 1962 Conference on the Impact of Urbanization on Education, at which representatives of Federal agencies concerned with public housing, urban renewal, city freeways, child welfare, education and labor, and

youth employment and delinquency met with school board members and superintendents from the 15 large cities that form the Research Council of the Great Cities Program for School Improvement. A valuable opportunity was thus provided for Federal and local officials to discuss and better understand their mutual problems and responsibilities.

A series of intensive case studies will be undertaken in a limited number of large cities where effective work has been done in coordinating school system planning with the planning and programs of urban renewal and other related urban development projects.

School facilities planning problems, which exist in every metropolitan area, were the subject of a conference held in the spring of 1962. As a result of this conference, an effort is underway to identify and to analyze the characteristic problems of planning school facilities in metropolitan centers.

In addition, the financing of urban schools was the subject of a conference called in May which resulted in a study concerned with the improvement of State school fund distribution formulas.

Two other conferences held in May directly attacked the problem of teaching hard-to-reach youngsters: "Teaching Children and Youth Who are Educationally Disadvantaged," and "Improving English Skills of Culturally-Different Youth in Large Cities." At these meetings there was a review of promising efforts in the field, identification of significant problems hindering progress, and projection of new approaches to the problems.

The high rate of mobility of families has often contributed to a breakdown in the school-community rapport so necessary to the success of the school program. The need to identify, attract, and develop sources of support and leadership among new residents is recognized by a current project on the improvement of school-home programs in disadvantaged neighborhoods in selected large city school systems. Still another study, a cooperative research project, is designed to evaluate the effectiveness of all-day neighborhood schools in New York City. When completed, these studies may provide information concerning a more effective educational approach to culturally deprived children.

The Office of Education has also participated in the joint task force established by the Department of Health, Education, and Welfare and the Housing and Home Finance Agency to promote concerted and improved health, education, and welfare services in public housing projects and urban development areas. This joint task force is designed to help public housing families on relief rolls work their way out of dependency.

FREEDOM AND WORLD UNDERSTANDING

In March 1962 approximately 140 leaders in American education met at the Office of Education to consider the state of American education in the light of the traditional ideals of freedom and the present need for achieving a greater understanding of other cultures, and to discuss methods of educating more effectively for the attainment of the goals of a free society. This conference on "The Ideals of American Freedom and the International Dimensions of Education," was addressed by the Secretary of Health, Education, and Welfare, the Assistant Secretary of State, and the Commissioner of Education. Their addresses and a summary of the salient ideas evolved from the deliberations of several committee sections have been published under the title, *Education for Freedom and World Understanding*. Discussion at the conference was characterized by the acknowledgment of shortcomings and an eagerness to strengthen and improve the educational resources of the United States. The conferees sought to define that common core of ideals which should command the allegiance of all Americans, and to discover ways and means to give those ideals more effective expression in education.

EQUAL OPPORTUNITY FOR EDUCATION

On March 30, 1962, the Commissioner of Education announced before a subcommittee of Congress plans for a clearinghouse on the educational problems of school desegregation. The establishment of this clearinghouse in the Office of Education provides a means for disseminating to interested citizens reliable information on educational practices used successfully by various school systems. Professional advice of the highest quality can thus be made available to the community, and significant research on the educational implications of desegregation can be stimulated. The clearinghouse will become active in fiscal year 1963.

Further, the Office of Education has concerned itself with the matter of civil rights and education. All colleges and universities conducting institutes for high school language teachers and guidance counselors under titles V and VI of the NDEA starting in 1962-63 have agreed that in selecting individuals for attendance at the institute and in otherwise conducting the institute, no discrimination will be made on account of sex, race, creed, color, or national origin of an applicant or enrollee.

Advances toward the goal of equal education have been made through the administration of the programs of school assistance in federally affected areas. A policy has been adopted under which segregated schools will, in the fall of 1963, be deemed unsuitable for the dependents of military or civilian personnel living on a military

installation and attending off-base schools; appropriate steps will be taken, where necessary and feasible, to provide suitable education for these children on the installation.

As a part of its annual review of State vocational education programs supported with Federal funds, the Office this year is inquiring for the first time into the availability of courses of training in predominantly Negro and predominantly white schools. A directive will be sent to all States advising that any program for training in a vocation offered with the assistance of Federal funds must be equally available to all children of the school system in which it is offered.

Special Programs

EXCEPTIONAL CHILDREN

Of the approximately 6 million school-age "exceptional" children in the United States in need of special education, it is estimated that not over one-fourth have access to it. Exceptional children are usually defined as those who are blind, partially seeing, deaf, or hard of hearing; those with impaired speech; those who are crippled or who have special health problems; those who are socially maladjusted or emotionally disturbed, mentally retarded, or highly gifted. Statistical surveys made by the Office of Education in 1948 and 1958 show that progress is being made, for during that decade the estimated percentage of those receiving specialized help rose from about 10 percent to about 25 percent, although the progress was rather uneven from one area of exceptionality to another.

All States now have made some provision for meeting the needs of at least some types of exceptional children. Developments in State legislation and programs for children suggest that in the relatively near future a large number of States will offer special education opportunities to all types of exceptional children. The extension of programs into some of the more sparsely populated areas is also encouraging. Of significance too is the increase of special education staffs in the various State departments of education. *Special Education Personnel in State Education Departments*, a directory issued by the Office of Education in September 1961, listed about 270 such positions, or an average of over 5 persons per State.

Special programs are developing in new or neglected areas of education, especially for emotionally disturbed or multihandicapped children. Some of these programs are on an experimental basis. Attention is also being given to children of a wider age range, including those in nursery and kindergarten or those in the older age bracket for whom school-work programs are being developed increasingly.

A diversity of organizational patterns was also noted in the most recent studies: full-time attendance in special classes, part-time attendance in special education combined with part-time attendance in regular grades, instruction in home and hospital, or in residential schools. The net result of these developments will be provisions for meeting more precisely the educational needs of the individual child.

Special education has been expanding at such a rate that an adequate supply of qualified teachers, as well as personnel for professional preparation and supervisory positions, continues to be a difficult problem. This has appeared to be of sufficient nationwide importance to bring about congressional approval of two laws providing for the training of such personnel. Under the provisions of Public Law 85-926, approximately 500 fellowships have been made available for advanced study in the education of the retarded. Beginning in September 1962 under the provisions of Public Law 85-276, over 400 persons will receive scholarships to prepare to become teachers of the deaf. Thus, Federal funds are being used in two important areas of exceptionality to make an attack on the problem of shortage of professional personnel.

There is continued need for further research and fact-finding on the education of exceptional children. Through the authorization given the Office of Education under Public Law 531 (Cooperative Research Program) and Public Law 85-864 (National Defense Education Act) a substantial number of research studies in this field have been completed. The Office of Education is currently conducting its sixth study of the opportunities for professional preparation of teachers of exceptional children. It will include information on colleges and universities offering sequences of preparation in the various areas of exceptionality and other status information. In addition, the Office has underway studies on State financial aid to public school systems and studies in the special areas of the visually handicapped, those who have speech impairments, and the mentally retarded. These are all steps toward the ultimate goal of providing adequate educational opportunity for all children who need it.

CAPTIONED FILMS FOR THE DEAF

The Captioned Films for the Deaf program, for the first time since it was enacted in 1958 (Public Law 85-905) operated under the maximum authorized appropriation of \$250,000. The program now serves 682 groups of deaf people in 48 of the 50 States.

A library of mostly full-length feature pictures, some of them educational or documentary films, tripled in size, reaching a total of 402 prints of some 113 titles. The demand continued to mount faster than supply, and the booking office located at the Indiana School

for the Deaf in Indianapolis was obliged to turn down many requests.

In addition to captioned educational films for classroom use, the Office has begun to provide educational and training films for the adult deaf. Due to the nature of their handicap, deaf adults benefit little from the many audiovisual training films available to the general public. However, these films can be acquired from commercial sources and captioned at a reasonable cost to make them highly serviceable to deaf people.

The films can be borrowed by groups of eight or more. The total audience for the year numbered 165,925 deaf persons, and participation continued to double in each 6-month period. Analysis of attendance records submitted to the Office of Education revealed that despite this growth, captioned films are still reaching only 10 percent of the total deaf population.

EARLY SCHOOL LEAVERS

In many American communities graduation from high school is considered the minimum education necessary for a boy or girl who wishes to obtain employment. This idea has grown steadily as unskilled labor has been replaced by machines. The manpower requirements for the future are expanding the aspiration for at least a high school education into a national goal.

In 1962 the percentage of young people of graduation age who completed high school was 64 percent. This national average varies by State from one which estimates that 80 percent of its young people graduate from high school to another which places its estimate at 40 percent.

Early school leaving occurs frequently in rural districts characterized by a low level of income. Although compulsory school attendance is generally not required beyond age 16, 2 years short of the age at which pupils normally graduate, there is little demand for raising the age to 18. More reliance is therefore placed on counseling pupils to remain in school, on the force of public opinion, and on the growing requirement that young men and women must have high school diplomas to qualify for the more desirable job openings. These measures in the past have brought a steady increase in high school completion; however, there is general agreement that the Nation's needs require a greatly accelerated increase in high school completion rates.

The national concern for finding means and methods of reducing the number of high school dropouts has produced a vast number of inquiries, in response to which the Office of Education supplies information and assistance through its several programs of review, research, and grants. Guidance specialists are on constant alert for

significant local guidance programs which have promise for holding potential dropouts in schools. The Office administers two grant programs which are contributing to the ultimate solution of this critical problem: under provisions of title V of the National Defense Education Act, grants for State and local guidance services, and for institutes for counselor training; and under title II of the act, loans to enable qualified college students to continue their education. During fiscal year 1962 plans were developed to undertake special guidance and counseling institutes for schools located in culturally deprived areas of large urban centers where the dropout problem is acute. In studying the dropout problem the Office cooperates with the President's Committee on Youth Employment and also with the President's Committee on Juvenile Delinquency.

PHYSICAL FITNESS SURVEY

At the request of President Kennedy's Council on Physical Fitness, the Office conducted a special study on physical fitness based on a scientific sample of the Nation's public schools. This study determined the extent to which schools were conducting physical fitness testing programs and the degree to which a bulletin published by the President's Council influenced the adoption of such a program. Results of this study as applied to the entire school-age population indicated that 15 million or approximately 40 percent of the Nation's young people failed to meet satisfactory physical standards. The Council has requested that this study be repeated during 1963 in order to provide a means of measuring the expansion and effectiveness of health and physical education programs in American schools.

PROGRAMS AND SERVICE FOR ADULTS

In the field of adult education, the Office of Education provides leadership and attempts to bring about a broad, unified, and coordinated approach. A major effort is the promotion of the concept of lifelong learning. The program includes general adult education, education for the aging, fundamental and literacy education, citizenship education, statistics on adult education, and professionalization of personnel in this field. The Office also provides consultative services to a substantial number of public and private agencies.

The following research reports have been completed and distributed: *Adventures in Learning*; *Frontiers Past Sixty in Hamilton, Ohio*; *Literacy and Basic Elementary Education for Adults: A Selected Annotated Bibliography*; and *Statistics of Public School Adult Education* (1958-59).

Three major research studies on aging have been approved under the Cooperative Research Program and are currently underway. They are: "Specialization of Attitudes Toward Adult Education by

Social Class," "A Study of the Role of Colleges and Universities in the Education of the Aged," and "An Evaluation of Communication Media Used in the Adult Liberal Studies Program."

Consultative services were provided to assist in the planning and development of curriculums for the aging in North Dakota, Iowa, and Minnesota. Assistance was also furnished the planning board of the Midwest Program on Airborne Television Instruction begun in June 1962 at Purdue University.

The Office provided advisory service to the Department of State for a mission to the Dominican Republic under the Agency for International Development, to the UNESCO World Committee of Literacy Experts, and to an African educational materials seminar.

Current statistics indicate that adult enrollments are increasing in all sections of the United States and State departments of public instruction are giving more attention to public school adult education. Eight States and Territories now have more than 1 staff specialist in this field at the State level; 12 others provide 1 staff person; 10 have one part-time person; 24 have no designated personnel for this purpose. In more than one-third of the cities, where the need for adult education programs is acute, there are no public school adult education programs.

TRAINING THE UNEMPLOYED

With the passage of the Manpower Development and Training Act of 1962 (Public Law 87-415), a program has been launched jointly by the Office of Education and the Department of Labor to meet the needs of unemployed and underemployed persons. Training projects usually originate at the local level, where training activities are conducted. Although no funds were made available until August 1962, it is anticipated that 45,000 people will be trained in fiscal year 1963.

The Office of Education also approves vocational retraining programs for unemployed and underemployed persons under the Area Redevelopment Act (Public Law 87-27), helps States and localities develop training program proposals, and provides sample syllabuses for the various programs. In fiscal year 1962, over 9,000 people in distressed areas in 34 States and in American Samoa were trained in 147 projects.

CIVIL DEFENSE EDUCATION

An understanding of the role of the individual, the family, and the community in State and national plans for protection against disasters which threaten the Nation and its people is an elemental need in the total civil defense effort. To contribute to fulfillment of this need, the Civil Defense Adult Education program was initiated by the Office of Education in cooperation with the Office of Civil and Defense

Mobilization in 1959. The success of pilot programs in Florida, Kentucky, Minnesota, and Texas, in 1959-60 led to extension to three other States in 1960-61 and eight more at the beginning of the 1962 fiscal year. Following the President's delegation of responsibility for the civil defense program to the Department of Defense in 1961, provisions were made for offering the Civil Defense Adult Education program to all States. By June 1962, 35 States, the District of Columbia, and Puerto Rico had contracted with the Office of Education to conduct the program in their States. Extension of the program to all States at an early date is an immediate goal.

This program is offered, without charge, through the adult education facilities in the various States. Twelve hours of instruction in the understanding of and protective measures against nuclear, chemical, and biological dangers, as well as natural disasters, is provided at the local level by selected teachers who receive special training in courses conducted by State staff members. Attendance of not less than 15 hours is required for teacher certification. The total cost of the program, \$1,655,000 in 1962, including payment to teachers in the local areas, is paid through the Department of Defense from Federal funds provided to the States under contractual agreement with the Office of Education.

Interagency Cooperation

As the Office has recently concerned itself with areas previously neglected in large part, it has turned also to the relationship of the various Federal agencies whose activities involve or affect education, and to the effect of their programs on the educational resources of the Nation. The Office, in its function as the primary Federal agency concerned solely with education, during the year laid the foundation for a pattern of relationships with other Federal agencies to promote a more coherent Federal policy and better coordination of activities.

The need for the coordination of Federal programs, especially in institutions of higher education, has been documented in several major studies. To examine whether educational programs are distorted by the impact of a variety of Federal programs ranging from the purchase of specific research services to the support of students pursuing specific courses of study, the Office of Education completed certain phases of a survey which may serve as a benchmark for the development of policies and procedures to strengthen the educational programs and objectives of institutions of higher education in the national interest.

The Commissioner of Education sought both formally and informally to extend and increase the exchange of views and cooperation between the Office and other Government agencies. These efforts

led to joint projects and to the planning of future programs that involve the responsibilities of more than one agency. For example, close liaison was established with the directors of the Office of Science and Technology, the National Science Foundation, the Atomic Energy Commission, and the National Aeronautics and Space Administration for the purpose of coordinating information and policy regarding Federal programs in education and the impact of such programs. The above listed endorsed the establishment of a task force and a consultative policy group, each consisting of representatives of the departments and agencies operating programs in education, that will assist the Office in its responsibility to report on Federal programs in education and to assess the impact of such programs. The task force and the consultative group are now being formed.

The Office of Education is assisting the chairman of the Civil Service Commission in developing and undertaking a program to promote education for the public service. A committee within the Office of Education is considering ways to develop a better understanding of education for public service among the schools, including improved guidance services; steps necessary for the strengthening of inservice educational and training programs, both within the Office of Education and governmentwide; means of attracting more and better college students and graduates to educational preparation for public service positions; and ways of engaging colleges and universities more specifically and more vigorously in educational preparation for public service.

The Office of Education also assists in the administration of the Juvenile Delinquency and Youth Offenses Control Act of 1961. During fiscal year 1962 the staff of the Office assisted in the evaluation of applications to the President's Commission on Juvenile Delinquency and Youth Crime for training grants, planning grants, and grants for demonstration projects. Office personnel also provided technical counsel to citizens about to draw up requests for grants and prepared to provide field service to the committee on approved projects.

Under an agreement with the Department of Defense, the Office began a national inventory of school facilities and personnel for resource evaluation and damage assessment. Through the combined efforts of the Office, Bureau of the Census, and the State education agencies, more than 106,000 public and nonpublic school plants which can be made available to the Office in the event of an emergency disaster were added to the National Resource Evaluation Library. During 1963, inventory forms from each school will be processed. Additional funds from the Department of Defense will enable the Office to identify and inventory an estimated 10,000 additional schools, and add newly constructed school plants to keep the inventory data

current. A conversion deck of data cards with Census, Office of Education, and National Resource Evaluation Center codes will also be developed to establish a data flow system among the respective agencies.

International Organizations and Programs

Cooperation with other Federal agencies has extended to international activities. In the past year, coordination and cooperation in international programs have been greatly increased through closer contact with the Department of State, the U.S. Information Agency, and the Peace Corps. For example, an education liaison officer has been designated to work with the Agency for International Development of the State Department, and that Agency in turn is assigning one of its senior officers to a position in the Bureau of International Education of the Office.

The Office cooperated with the U.S. National Commission for UNESCO in the formulation, review, and revision of projects for the proposed UNESCO program and budget and in the dissemination of information on UNESCO's program to the U.S. educational community. The Office also participated in the planning of the Commission's biennial conference, and an Office specialist prepared background papers on African education for consideration at the conference.

The Office participated in a variety of international seminars, workshops, and meetings held under the auspices of intergovernmental organizations; prepared reports and annotated bibliographies; and supplied publications on U.S. educational practices in response to requests from various bodies of the United Nations, such as UNESCO and UNICEF, the International Labour Organization, the International Bureau of Education, the Organization of American States, and other international agencies.

A number of major studies on education in the United States were developed for international use, on subjects which included higher education, the access of women and girls to education in rural areas, vocational and technical education, educational planning, the education and training of professional engineers, and the inservice education of primary school teachers. The Office, which acts as secretariat for the United States membership in the International Bureau of Education, prepared the 1962 publication, *Progress of Public Education in the United States of America* in English, French, Russian, and Spanish for presentation to the IBE's International Conference on Public Education at Geneva in July. The Office also published in both French and English its replies to the questionnaires which

formed the basis of discussion of the two technical committees of the Conference.

Office specialists served as experts or delegates at some 20 international seminars, workshops, or conferences held in Europe, Asia, Africa, and Latin America under the sponsorship of the United Nations, UNESCO, International Bureau of Education, International Labour Office, and World Health Organization. The Office also was represented in Santiago, Chile, at the Conference on Education and Economic and Social Development in Latin America, and at a meeting of Asian ministers of education in Tokyo, Japan.

Educational Research and Development

Elementary and Secondary Education

STRENGTHENING STATE DEPARTMENTS OF EDUCATION

The Office of Education provides informational, consultative, and research services and administers several Federal assistance programs to enable State agencies to increase their effectiveness in dealing with the schools.

Improving Statistical Services.—One of the programs of the Office of Education is concerned with the improvement and expansion of the statistical services of State education agencies. Under this program, administered under the provisions of section 1009 of title X of the National Defense Education Act, the States may obtain grants of up to \$50,000 annually on the basis of approved State plans, the Federal funds to be matched equally with State funds. As a result of this program the statistical services staff of the State education agencies has more than doubled, and the number of States and Territories using data processing equipment has almost quadrupled since 1958. In fiscal year 1962 there were 53 plans approved for a total of approximately \$1.5 million. Several States requested the full \$50,000 available to them, and some overmatched the Federal funds.

These Federal and State monies, with professional assistance of the Office of Education staff, have provided during this fiscal year continued improvement in the standardization of educational terminology and in the development of a total systems approach in the collection, processing, interpretation, and dissemination of educational information.

Improving Supervisory Services.—In addition, the National Defense Education Act provides Federal grants to expand and improve the consultant services of State supervisory staffs. Up to \$5 million annually is authorized on a matching basis for State supervisory programs in science, mathematics, and modern foreign languages. Funds

are also authorized for State guidance supervisors. The number of State supervisors in the areas of science, mathematics, and modern foreign languages has increased from 33 to more than 200, and the number of guidance supervisors from 99 to approximately 250. State consultant services to local school districts have greatly improved. States are providing more inservice education programs for teachers and administrators, and curriculum guides and other professional publications have increased in number and improved in quality. There has also been a growth of local guidance programs in the secondary schools. The effectiveness of these programs has led educational administrators to explore ways of providing comparable leadership services in other areas and fields.

STAFF IN PUBLIC SCHOOLS

The seriousness of the problems of salary, of recruitment, and of teacher preparation must be alleviated if the schools of the Nation are to meet the responsibilities ahead of them, for the schools will be able to compete for personnel only when teaching offers a high level of personal and professional satisfaction. A system of free public education is accepted by society as vital to the growth of the Nation; but the schools will grow in strength only as the teaching staff grows, and if society demands the best education for its youth, it must also be willing to support the cost of the best possible education program.

Shortage of Teachers.—The continuously increasing public school population represents a critical factor in the Nation's ability to staff its schools with an adequate number of qualified teachers. In the fall of 1961 the number of classroom teachers in the public schools was 1,461,000, an increase of 53,000 over the previous year. However, it is estimated that more than 100,000 teachers leave the classroom annually and must be replaced. Tens of thousands are still needed to eliminate double sessions and overcrowding, to replace teachers who are inadequately prepared, and to provide certain vital educational services now omitted because of lack of staff.

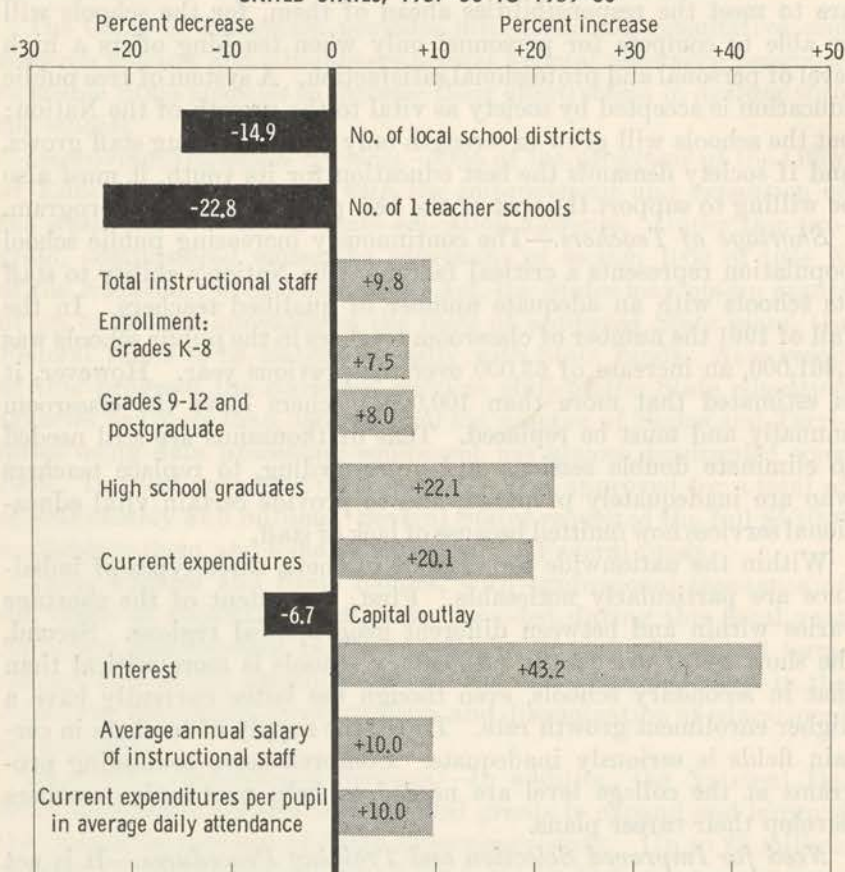
Within the nationwide shortage of teachers, three types of imbalance are particularly noticeable. First, the extent of the shortage varies within and between different geographical regions. Second, the shortage of teachers in elementary schools is more critical than that in secondary schools, even though the latter currently have a higher enrollment growth rate. Third, the supply of teachers in certain fields is seriously inadequate. Comprehensive counseling programs at the college level are needed to help prospective teachers develop their career plans.

Need for Improved Selection and Training Procedures.—It is not enough merely to staff each classroom with a teacher—it is vital that

the teacher be professionally qualified and competent. In the report, "Ten-Year Aims in Education, Staffing, and Constructing Public Elementary and Secondary Schools, 1959-1969," a dual program recommended for achieving this goal is to elevate the salary level and improve the procedures for the selection of teachers. The selection process includes first the recruitment of students into the teacher preparation program, followed by the preparation program itself, and then the attempt on the part of each local school district to select the most competent candidates possible.

It is essential to foster cooperative efforts among the agencies and groups responsible for training, selecting, and assisting in the upgrading of teaching personnel. The existence of cooperative professional relationships among the State departments of education, the local

CHART 1.—CHANGES WITHIN THE PUBLIC ELEMENTARY AND SECONDARY SCHOOL SYSTEM, UNITED STATES, 1957-58 TO 1959-60



Source: U.S. Department of Health, Education, and Welfare, Office of Education, *Statistics of State School Systems, 1959-60*.

districts, the professional associations, and the teacher education institutions is, the report notes, prerequisite to improvement in the quality of teacher education. There is evidence that, through the efforts of these several groups, a positive change is occurring in the teacher education program of the Nation.

The professional growth of the teacher in service is a matter of great concern to the Office. Recent developments in instructional techniques, organization, and materials have made the need for strong inservice development programs even more important than in the past.

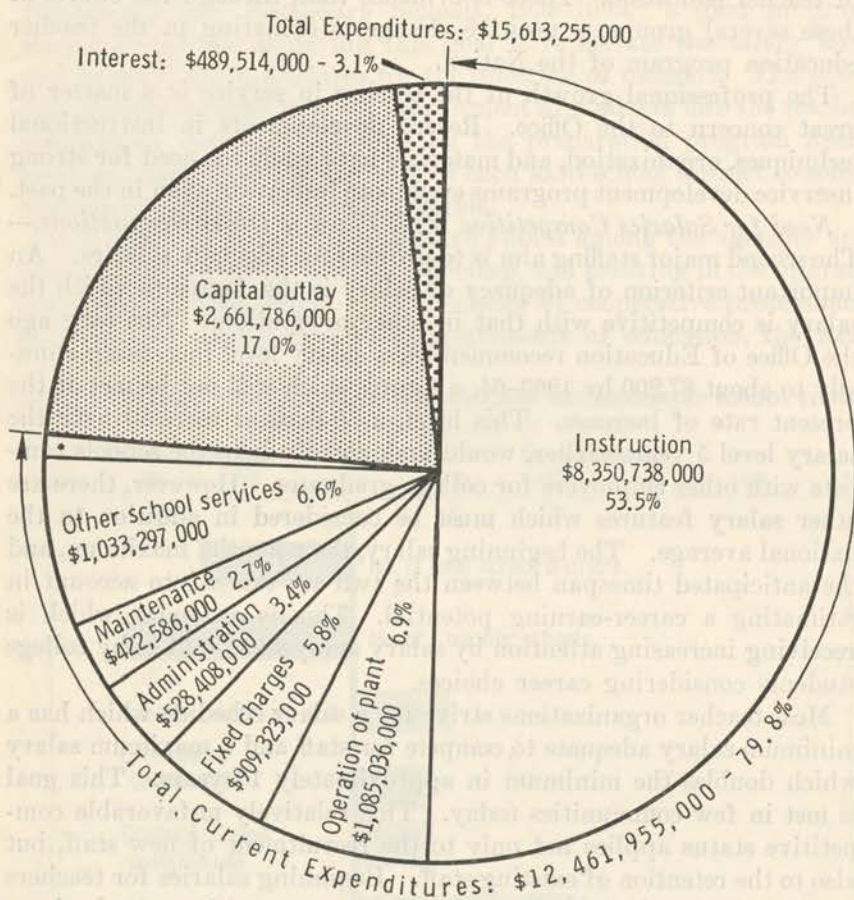
Need for Salaries Competitive With Those in Other Occupations.—The second major staffing aim is to provide for adequate salaries. An important criterion of adequacy of salary is the degree to which the salary is competitive with that in other occupations. Not long ago the Office of Education recommended a salary level increasing annually to about \$7,200 by 1963-64, a figure which will not be met at the present rate of increase. This level, a 50-percent increase over the salary level 5 years earlier, would undoubtedly help the schools compete with other employers for college graduates. However, there are other salary features which must be considered in addition to the national average. The beginning salary, the potential maximum, and the anticipated timespan between the two are taken into account in estimating a career-earning potential. This is an index which is receiving increasing attention by salary analysts as well as by college students considering career choices.

Most teacher organizations strive for a salary schedule which has a minimum salary adequate to compete for staff and a maximum salary which doubles the minimum in approximately 10 years. This goal is met in few communities today. This relatively unfavorable competitive status applies not only to the recruitment of new staff, but also to the retention of existing staff. Beginning salaries for teachers are from \$500 to \$1,500 below the averages reported in major business and industrial positions requiring preparation comparable to that of the teacher, and salaries after 5 or 10 years show even larger differentials. The 30- or 40-year earning potential for classroom teachers is significantly below that which individuals in other occupations requiring similar experience and education can anticipate.

FACILITIES NEEDED

The public elementary and secondary schools in the 50 States and the District of Columbia enrolled 37.5 million pupils in the fall of 1961—an increase of 1.2 million, or 3.4 percent, over comparable enrollment 1 year earlier. Of the 1961 total, an estimated, 1,693,000 pupils, or 4.3 percent, were enrolled in excess of the normal capacity of accessible, publicly owned school facilities then in use.

CHART 2.—SUMMARY OF EXPENDITURES FOR PUBLIC ELEMENTARY AND SECONDARY SCHOOLS: UNITED STATES, 1959-60



*Other current expenditures: \$132,567,000 - 0.8%

Note: Data are for 50 States and the District of Columbia. Because of rounding, detail may not add to totals.

Source: U.S. Department of Health, Education, and Welfare, Office of Education, *Statistics of State School Systems, 1959-60*.

Local school officials, confronted by more pupils than their facilities were designed to handle, followed one or more of several alternatives to accommodate them: using rented or donated quarters such as churches, lodge halls, and other buildings; converting to instructional use spaces in school buildings designed for other purposes; utilizing substandard and/or makeshift facilities; and dividing the school day into two or more sessions so that two or more groups could use the same facilities each day.

More than 571,000 pupils were affected by the shortened school day in 1961, an improvement over the previous year when 657,000 were affected by curtailed sessions. Notwithstanding this improvement, the country's need for additional classrooms is pressing; and in localities where population growth has been rapid, the need is acute.

In the fall of 1961, State education agencies reported the need of 127,300 additional instruction rooms—60,300 to accommodate pupils in excess of the normal capacity of accessible, publicly owned facilities and 67,000 to replace unsatisfactory rooms then in use. The percentage distribution for these two categories of need was 47.4 and 52.6, respectively, but this distribution was heavily weighted by the high concentration of unsatisfactory rooms in several States.

The present backlog results from the fact that construction of new facilities has not kept pace with needs. Of the 72,000 instruction rooms to be completed during 1961-62, only a small proportion could be applied against the reduction of the reported backlog of 127,300 rooms, because thousands of rooms are required to accommodate population shifts, to replace rooms abandoned for one reason or another during the year, and to house the enrollment increase of 1.4 million pupils from 1961-62 to 1962-63.

Moreover, under present and probable future conditions, classroom needs will continue during the remaining years of this decade. The average annual rate of classroom construction for the past 6 years (1955-56 through 1960-61) was 69,200 instruction rooms, a number only slightly in excess of requirements for increased enrollments.

Since an increasing number of school districts reached statutory debt limitations through long-term financing of school facilities, and a significant number of communities voted against school bond issues during the past year, the trend toward less school construction may continue. Meanwhile, classroom needs will continue to mount, for enrollment will increase by almost 1 million pupils in each of the remaining years of this decade; loss of school facilities by fire and other causes will continue; population shifts will cause abandonment of satisfactory facilities in some communities and create the need for new ones in others; current emphasis on urban renewal will have implications for school construction; limited-access highways are creating problems with respect to the location and size of present and future school centers; public acceptance of, and sometimes insistence upon, extending the school program downward to include kindergarten and nursery and upward to include junior college and perhaps programs for adult education (including retraining for new jobs) will create a need for thousands of additional classrooms; and finally, new concepts of teaching, of the learning process, and of goals to be accomplished

Table 1.—Enrollment in grades 9–12 in public and nonpublic schools, and population 14–17 years of age: United States, 1889–90 to 1961–62

School year	Enrollment, grades 9–12 and postgraduate ¹			Population 14–17 years of age ²	Total number enrolled per 100 persons 14–17 years of age
	All schools	Public schools	Nonpublic schools		
1889–90.....	359,949	\$ 202,963	\$ 94,931	5,354,653	6.7
1890–1900.....	699,403	\$ 519,251	\$ 110,797	6,152,231	11.4
1909–10.....	1,115,398	\$ 915,061	\$ 117,400	7,220,298	15.4
1919–20.....	2,500,176	\$ 2,200,389	\$ 213,920	7,735,841	32.3
1929–30.....	4,804,255	\$ 4,399,422	\$ 341,158	9,341,221	51.4
1939–40.....	7,123,009	6,635,337	487,672	9,720,419	73.3
1941–42.....	6,933,265	6,420,544	512,721	\$ 9,749,000	71.1
1943–44.....	6,030,617	5,384,656	445,961	\$ 9,449,000	63.8
1945–46.....	6,237,133	5,664,528	572,605	\$ 9,056,000	68.9
1947–48.....	6,305,168	5,675,937	629,231	\$ 8,841,000	71.3
1949–50.....	6,453,009	5,757,810	695,199	8,404,768	76.8
1951–52.....	6,596,351	5,917,384	678,967	\$ 8,525,000	77.4
1953–54.....	7,108,973	6,330,565	778,408	\$ 8,878,000	80.1
1955–56.....	7,774,975	6,917,790	857,185	\$ 9,229,000	84.2
1957–58.....	8,868,586	7,905,569	963,017	\$ 10,164,000	87.3
1959–60 ³	9,700,000	8,600,000	1,100,000	11,154,879	87.0
1961–62 ⁴	10,800,000	9,600,000	1,200,000	\$ 12,027,000	89.8

¹ Unless otherwise indicated, includes enrollment in subcollegiate departments of institutions of higher education and in residential schools for exceptional children. Beginning in 1949–50, also includes Federal schools.

² Includes all persons residing in continental United States, but excludes Armed Forces overseas. Data shown are actual figures from the decennial censuses of population unless otherwise indicated.

³ Excludes enrollment in subcollegiate departments of institutions of higher education and in residential schools for exceptional children.

⁴ Data for 1927–28.

⁵ Estimated by the Bureau of the Census as of July 1 preceding the opening of the school year.

⁶ Estimated data for 50 States and the District of Columbia.

NOTE: Unless otherwise indicated, data are for 48 States and the District of Columbia.

SOURCE: U.S. Department of Health, Education, and Welfare, Office of Education, *Biennial Survey of Education in the United States*.

will tend to make obsolete many buildings that might otherwise remain useful.

The Office of Education offers assistance to State departments of education, and through them to local school systems, by providing technical information and consultative services on numerous problems associated with schoolhousing needs, such as long-range planning; construction and technological advances; functional planning; the development of educational specifications; and the selection, purchase, and utilization of supplies, furniture, and equipment.

FINANCING PUBLIC EDUCATION

For the 1961–62 school year, the total amount of revenue provided from all sources for the support of public elementary and secondary schools was estimated to be approximately \$16.6 billion. This represented an increase of more than \$1.3 billion, or 8.7 percent over the estimated \$15.3 billion provided during the previous year.

Local School Revenue

Taxes raised at the local level still provide over half the funds available to the local boards of education (see chart I). The system of local taxation is, therefore, of considerable significance as a source of funds for educational purposes.

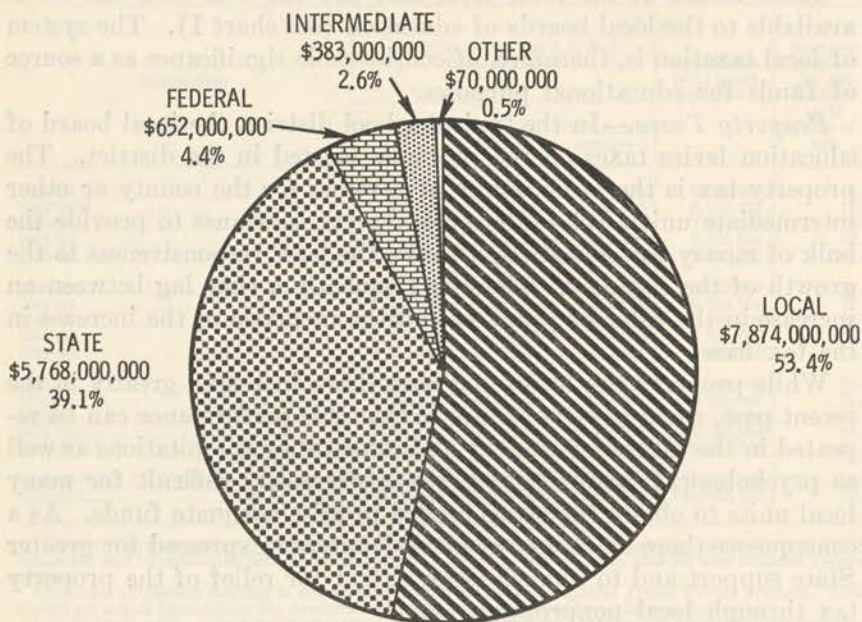
Property Taxes.—In the typical school district, the local board of education levies taxes on the property located in the district. The property tax is the basic source of revenue for the county or other intermediate unit. While the property tax continues to provide the bulk of money for education, it shows the least responsiveness to the growth of the economy. There is frequently a time lag between an increase in the value of property and the inclusion of the increase in the tax base.

While property tax levies and bases have increased greatly in the recent past, there is little assurance that this performance can be repeated in the future. Statutory and constitutional limitations as well as psychological factors have made it extremely difficult for many local units to obtain the levies needed to raise adequate funds. As a consequence there has been considerable interest expressed for greater State support and to a much lesser extent for relief of the property tax through local nonproperty taxes.

Nonproperty Taxes.—Taxes on such items as wages, motor vehicles, deed transfers, hotel occupancy, amusements, general sales, and other business transactions are among those levied on nonproperty sources for schools. Taxes of this type are not in general use, but they do produce about one-fifth of the local school revenue in Pennsylvania and considerably smaller amounts in other States. The town, city, or county which provides money for dependent schools tends to use nonproperty taxes to a greater extent than do independent school districts, but even here a major portion of the property tax rate is frequently designated for schools. This has the effect of shifting the nonproperty tax sources to nonschool functions, thereby causing the schools to rely heavily on the property tax.

Bonded Indebtness.—Since most school construction in the United States is based on bond financing, information on debt cost is important to school boards and officials. The Office of Education reports monthly in *School Life* the average net interest costs on Moody-rated school bonds. An annual publication, *Bond Sales for Public School Purposes*, gives State by State the number and amount of bond sales, as well as the net interest costs by issuing agencies and by Moody ratings. These reports supply boards of education with information which will help them make judgments on the acceptance or rejection of bids for the sale of bonds. According to the Moody ratings, the average net interest cost declined from 3.41 percent in July 1961 to 3.21 percent in June 1962.

CHART 3.—REVENUE RECEIPTS FOR PUBLIC ELEMENTARY AND SECONDARY SCHOOLS, BY SOURCE: UNITED STATES, 1959-60



TOTAL REVENUE RECEIPTS: \$14,747,000,000

Note: Data are for 50 States and the District of Columbia.

Source: U.S. Department of Health, Education, and Welfare, Office of Education, *Statistics of State School Systems, 1959-60*.

The annual sale of school bonds has increased from \$1.87 billion to \$2.56 billion over the 6-year period ending in 1961-62. In 1961-62 school bond sales rose to a high of \$2.56 billion, 5.8 percent above the previous peak of \$2.42 billion reached in 1957-58. This is 8.5 percent above the 1960-61 sales, which totaled \$2.36 billion. The total amount of school bond sales for the 6-year period was \$13.4 billion.

The average net interest rate on all school bonds, rated and non-rated, declined from 3.91 percent in 1959-60 to 3.52 percent in 1960-61 and continued downward to 3.33 percent in 1961-62. The total expenditure for debt service, amount required for repayment of principal and interest, is a rapidly expanding item in school budgets.

State Funds for Schools

In spite of the considerable pressure for increased funds, the States continued to provide an average of about 40 percent of the total public school revenue for grades K-12, a pattern which has prevailed since 1948. Although there is a slight tendency for this percentage to rise, the amount of rise is so slight that the plateau of State support

Table 2.—Office of Education enrollment estimates: United States, 1960-61 and 1961-62

[Estimates are for total enrollment during the school year. These figures are larger than the figures for fall enrollment]

Type of school, by grade level	School year 1960-61	School year 1961-62
Total, elementary, secondary, and higher education	47,900,000	49,300,000
Kindergarten through grade 8	33,800,000	34,200,000
Public school system (regular full-time)	28,400,000	28,700,000
Nonpublic schools (regular full-time)	5,200,000	5,300,000
Other schools ¹	200,000	200,000
Grades 9 through 12	10,100,000	10,800,000
Public school system (regular full-time)	8,900,000	9,500,000
Nonpublic schools (regular full-time)	1,100,000	1,200,000
Other schools ¹	100,000	100,000
Kindergarten through grade 12	43,900,000	45,000,000
Public school system (regular full-time)	37,300,000	38,200,000
Nonpublic schools (regular full-time)	6,300,000	6,500,000
Other schools ¹	300,000	300,000
Higher education: Universities, colleges, professional schools, junior colleges, normal schools, and teachers colleges (degree-credit enrollment)	4,000,000	4,300,000

¹ Includes Federal schools for Indians, federally operated elementary-secondary schools on posts, model and practice schools in teacher training institutions, subcollegiate departments of colleges, and residential schools for exceptional children.

NOTE: The figures in this table are all estimates for 50 States and the District of Columbia.

seems to be effectively maintained at just over 39 percent. Figures for the individual States, however, range from slightly in excess of 5 percent to more than 80 percent.

Sources of tax income for the programs of State support come almost entirely from nonproperty taxes in individual and corporate income taxes, sales taxes, death and gift taxes, taxes on natural resources, and motor vehicle licenses appropriated from the States' general revenue funds. An estimated 75 percent of the State funds for schools are provided from general revenue sources, while the remaining 25 percent of the funds are obtained from taxes collected specifically for the schools. Less than 1 percent of State collected revenue for schools is derived from State property taxes, either in general or earmarked revenue.

New provisions for State support of public elementary and secondary education reflect a growing awareness among the States of the need for educational and financial improvement. There is an increasing emphasis for some States to assume a percentage of the school expenditures above the foundation level, thus removing the support ceiling. In one State new foundation support levels may be established through executive adjustment rather than legislative specification, thus increasing the responsiveness of the State program to economic change. There are some States in which variations in the costs of education are recognized in the apportionment of State

funds, thus aiding special high-cost areas, such as large cities or remote rural areas.

Through the application of provisions such as these, States may overcome some of the most significant difficulties in providing an equitable program of State support for public education. Emphasis is directed toward better programs rather than minimal programs; adjustment of support levels is continuous rather than fixed by the legislature; and allowances are made for exceptional costs in the school districts.

Table 3.—Gross national product related to total expenditures¹ for education: United States, 1929–30 to 1961–62

Calendar year	Gross national product (in millions)	School year	Expenditures for education	
			Total (in millions)	As a percent of gross national product
1929.....	\$104,436	1929-30	\$3,234	3.10
1931.....	76,271	1931-32	2,966	3.89
1933.....	55,964	1933-34	2,295	4.10
1935.....	72,502	1935-36	2,651	3.65
1937.....	90,780	1937-38	3,014	3.32
1939.....	91,095	1939-40	3,200	3.51
1941.....	125,822	1941-42	3,204	2.55
1943.....	192,513	1943-44	3,522	1.83
1945.....	213,558	1945-46	4,168	1.95
1947.....	234,289	1947-48	6,574	2.81
1949.....	258,054	1949-50	8,796	3.41
1951.....	328,975	1951-52	11,312	3.44
1953.....	365,385	1953-54	13,950	3.82
1955.....	397,469	1955-56	16,812	4.23
1957.....	442,769	1957-58	21,120	4.77
1959.....	482,704	1959-60	24,722	5.12
1961.....	518,725	1961-62	28,962	5.58

¹ Includes expenditures of public and nonpublic schools at all levels of education (elementary, secondary and higher education).

² Estimate for 50 States and the District of Columbia.

NOTE: Unless otherwise indicated, data are for 48 States and the District of Columbia.

SOURCES: U.S. Department of Health, Education, and Welfare, Office of Education, *Biennial Survey of Education in the United States*; U.S. Department of Commerce, Office of Business Economics, *Survey of Current Business*, July 1958 and July 1962.

Federal Support

Federal appropriations to the 50 States and the District of Columbia for public elementary and secondary schools totaled an estimated \$609 million for 1961–62 and accounted for an estimated 3.7 percent of the total revenue from all sources. This proportion is roughly comparable to other recent years.

Perhaps the most significant fact is that receipts from Federal sources increased \$26 million, 4.5 percent over the previous year. Yet, the Federal funds continue to amount only to some 4 percent of the total school revenue, since both local and State revenues have continued to increase correspondingly.

For details concerning specific programs in education, see Educational Assistance Programs.

OFFERINGS AND ENROLLMENTS**English**

During the past year national interest in the English curriculum has been raised to a high level. State departments of education and colleges and universities have shown enthusiasm for undertaking research in English and developing new curriculum materials, principally for the secondary schools. The curriculum areas most frequently studied are written composition, linguistics, and reading. For information on Project English, see Sponsored Research on page 279.

Several cooperative research studies sponsored by the Office of Education have significance for the elementary school program. Two studies completed this year concern children's language use as related to the language of their reading textbooks. It is probable that these studies will influence the production of new reading texts and the revision of existing textbooks. Curriculum centers for Project English include two which will give attention to the development of reading materials at the elementary school level.

Special emphasis has been placed on curriculum for the college-bound student by the Commission on English of the College Entrance Examination Board. The Commission held a summer conference of college teachers and others to plan institutes for selected high school teachers, who would receive grants to attend. The conference designated composition, language, and literature as the three areas of study which legitimately constitute the English curriculum.

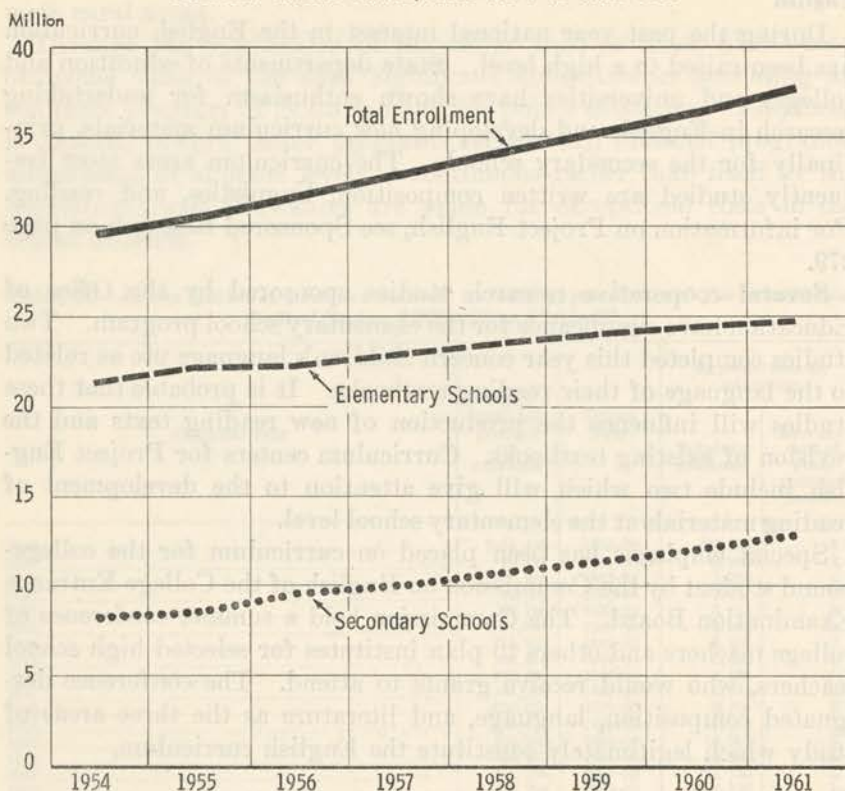
The Arts

The neglect of the arts in American life has become a cause of grave concern to an increasing number of national leaders. History has demonstrated that the arts contribute in a high degree to the intellectual and spiritual development of a people. The Nation can ill afford to slight this creative dimension of education. During the year the Office of Education gave serious consideration to the place of the arts in education and examined its role in achieving an increased emphasis on the arts in schools and colleges. It created a Division of Continuing Education and Cultural Affairs and developed the groundwork for a program to assess the status and condition of art education throughout the Nation and to encourage and to promote through a variety of activities the more effective teaching of the arts at all educational levels.

Foreign Languages

The expansion of both foreign language enrollments and foreign language offerings has continued during 1961-62. At the elementary school level attention has been focused on the evaluation of existing

CHART 4.—TRENDS IN ENROLLMENT IN FULL-TIME ELEMENTARY AND SECONDARY DAY SCHOOLS: UNITED STATES, FALL 1954 TO FALL 1961



Source: U.S. Department of Health, Education, and Welfare, Office of Education. Fall 1960 Statistics on Enrollment, Teachers, and Schoolhousing.

foreign language programs. Reports of research studies in this area have been significant in bringing about a review of purpose and a refinement of curriculum. Improved programs stress orderly language progression within the elementary school system and articulation with the junior high school program.

Junior and senior high schools have given increasing attention to the development of new methods and techniques for integrating listening and speaking with reading and writing. These practices are designed to achieve greater efficiency in the development of the four language skills.

Electronic instructional equipment, most of which was acquired by matching funds under title III of the National Defense Education Act, is a basic element in the development of understanding and speaking skills. By 1962 at least 5,000 foreign language laboratories were in use in public secondary schools, as compared with 46 prior to NDEA. However, more than three-fourths of the public high schools in this country are still without language laboratories.

Financial assistance also was available to expand the language supervisory services of State educational agencies. By July 1962, 57 State supervisors of modern foreign languages were employed in 37 States and the District of Columbia. Through inservice teacher education programs and consultative services to local schools these specialists have contributed substantially to the quality and quantity of modern foreign language instruction in the public schools. New and improved programs of study have been developed, resulting in the addition of new languages to the curriculum and the lengthening of the usual 2-year program of instruction to 4, 6, or even 8 years in some school systems. This expansion included the addition of many new foreign language programs in the elementary schools. The Modern Language Association of America under a title VI grant reported in September 1962 that 60.8 percent of the high schools were offering a modern foreign language (as compared with 50.4 percent in 1958) and enrollments in modern foreign languages had increased in grades 9 to 12 from 1,300,882 in the fall of 1958 to 1,872,946 in the fall of 1960.

State foreign language supervisors have developed a variety of curriculum guides to aid teachers in the expanded programs and have kept teachers informed of developments in foreign language teaching through a network of newsletters and bulletins. These specialists also devoted their efforts to the strengthening of certification requirements and to the achievement of better coordination with institutions which prepare teachers. The high degree of success of strong supervisory and consultant services at the State level has highlighted the value of this provision of the NDEA. These efforts must continue to increase if the Nation is to achieve the goal of adequate foreign language preparation for American citizens.

There is no doubt about the interest and desire of the elementary and secondary school teachers of modern foreign languages to improve personal skills in the languages taught and to learn better methods of teaching languages: more than 20,000 applications were received from such teachers for attendance at the National Defense Education Act language institutes during the summer of 1962, although only 4,368 could be accommodated.

Science

Science teaching in the public schools continues to improve, thanks to the impetus of space technology over the past year.

The financial support provided for improving science teaching in the schools through grants from the National Science Foundation, the National Aeronautics and Space Administration, the Atomic Energy Commission, and the Office of Education have provided unprecedented resources for improving school science programs.

Under the STEPS Program (Science Teaching for Excellence: Program Steps) launched over a year ago by the science staff of the Office of Education, pilot projects are now in progress in about 20 States, and the program is spreading to others. In this program local and State personnel work cooperatively over a period of several years to upgrade science programs by catalyzing the new resources into action programs at the grass-roots level. Currently, in several States, programs are going forward to upgrade junior high school and elementary school science teachers through local inservice institutes taught by capable high school teachers, many of whom have attended institutes sponsored by the National Science Foundation.

On June 25-29, 1962, the Office of Education invited State science supervisors to a conference on "Supervision for Quality Education in Science." The group reviewed the latest developments in science as they affect education, explored new emphases in selected special fields of science teaching, and developed guidelines for leadership in supervision. The conference not only afforded the opportunity for an exchange of valuable ideas, but aided in the clarification of the role and function of State science supervisors. A report will be released by the Office.

This past year science education programs have shown marked expansion and improvement, due in large part to financial assistance and State leadership made possible by the National Defense Education Act, title III. State science specialists have increased in number from 16 to 99 and are providing inservice teacher education in their areas through workshops, conferences, publications, and consultative services. Teachers are being brought into closer working relationships with research scientists, university scholars, and representatives of business, industry, and the professional scientific societies.

Both course offerings and student enrollments are increasing at all levels of science instruction in the schools. Not only have content and methods been carefully examined to insure sequential development, but schools have been stimulated to reprogram their offerings to challenge academically talented students. Through NDEA acquisition programs, new instructional equipment and materials have given impetus to K-12 programs and have modernized many science laboratories. Although substantial progress can be noted, a large portion of the elementary and secondary schools still lack adequate facilities for science instruction.

The various national curriculum study groups have expanded their programs both nationally and internationally and have begun to sharpen their evaluative procedures. As a result of feasibility studies conducted by the American Association for the Advancement of Science, a commission was appointed to plan the improvement of science

in the elementary and junior high schools. Experimental programs in elementary science are now being initiated as never before.

The Office of Education developed plans for a new national science youth organization implementing Public Law 85-875. In addition the Office cooperated with State departments of education in Texas and Massachusetts in conducting "science congresses" to promote annual statewide science-youth programs involving discussion groups, presentation of scientific papers, talks, exhibits, etc. All of these activities are directed toward increasing the opportunity for science education for interested youth.

Mathematics

During the past year the Office of Education has increased its emphasis on consultative work with State supervisors of mathematics. A total of 48 State departments of education were visited by the mathematics specialists from the Office of Education. Some of the specific purposes of these visits were: (a) to stimulate pilot projects in inservice education, (b) to assist the mathematics supervisor in planning his program, (c) to promote cooperation between State departments of education and institutions of higher education, (d) to encourage pilot projects in mathematics for the underachiever, and (e) to establish cooperative projects in mathematics and science.

In terms of advancement of knowledge and dissemination of information relative to mathematics education, continuing projects include: *Summary of Research Studies in Mathematics Education*, *Status of Junior High School Mathematics*, *Number of Mathematics Teachers*, and *Offerings and Enrollments in Mathematics and Science*. In addition, a new study was initiated, *Offerings and Enrollments in Mathematics and Science in Summer School*.

As for action programs for conservation of human resources, there is a mounting need for attention to the underachiever in mathematics. A new study on programs for the underachiever and a related conference on programs for the underachiever in mathematics have been planned. Another related study on the status of mathematics programs in large cities is also in the planning stage.

Mathematics received major emphasis in elementary schools throughout the country during the past year. Experimental centers, sponsored by the Federal Government and by private foundations, reflected increased attention to the structure and meaning of mathematics and to effective methods of teaching the subject.

Mathematics education is profiting through the efforts of mathematics specialists working in a supervisory capacity in State departments of education. Seventy-four such specialists are presently employed in 41 States, the District of Columbia, and Puerto Rico. Through the utilization of Federal matching funds on a dollar-for-

dollar basis, made possible by the National Defense Education Act, title III, these specialists are beginning to effect improvements in mathematics instruction and curriculum development in local schools throughout the country.

The title III acquisition program is also contributing to mathematics curriculum improvement projects in 48 States, the District of Columbia, and outlying possessions. This program has provided mathematics classrooms with multisensory aids, filmed and projectual material and equipment, reference books, and improved instructional facilities.

There exists a continuing need to further improve mathematics offerings, especially in the elementary school. The curriculum and teacher improvement programs previously referred to have been most effective in the secondary schools. A continued effort must be made to extend and expand the services offered by mathematics supervisory personnel. As more emphasis is placed on a modernized instructional program in mathematics, there will be a need for major improvement in the area of teacher preparatory and inservice educational programs. The phenomenal rate of growth of mathematical knowledge itself provides ample supporting evidence that all efforts being made to improve its teaching and learning must be continued.

During the year the Office called a meeting of State supervisors of mathematics for the purpose of considering ways to strengthen the leadership of the State supervisor of mathematics with respect to developing mathematics curriculums, strengthening inservice and pre-service training in mathematics, supporting research in the teaching of mathematics, and evaluating State programs in mathematics.

GUIDANCE AND TESTING SERVICES

Identifying Talent

Talent is not always apparent to the casual or even the trained observer. High achievement, particularly if it is in keeping with adult expectations and evidenced through conforming behavior, is readily noted, but when talent is masked by indifference, social mores, or non-conformity, it may never be identified.

School and college personnel must recognize their responsibility for the determination of criteria for identifying talent and must establish systematic, continuing programs for recognizing high potential. Criteria will vary with the level of maturity of the student and should involve multiple elements. Variables such as mental ability, artistic ability, creativity, persistence, reading ability, motivation, aspirational levels, energy levels, individual value systems, patterns of conformity, and study skills may well be considered. To be useful in the development of criteria for identifying talent, how-

ever, an element must be subject to measurement by valid and reliable instruments such as tests, interview schedules, observational checklists, and records. With the help of established criteria and carefully designed programs, teachers and counselors can discover latent talent.

There is growing recognition of the importance of early identification of student potential and student needs. It is also recognized that serious student problems can best be prevented if corrective steps are begun in the earliest years of school experience. Such awareness is causing attention to be focused upon expanding and strengthening guidance services in elementary schools.

The Office has established committees and is developing a program for helping to stimulate and improve plans for the identification and nurture of talent in cooperation with State departments of education and colleges and universities.

States may apply for funds under provisions of the National Defense Education Act (title V, A) to improve and extend their guidance, counseling, and testing services. Reports from the States indicate that the NDEA program has been effective in helping students set their goals, plan their careers, and take advantage of educational opportunities. Many of these students were planning to drop out of high school or were not planning to go to college.

Reports from States also indicate, however, that while steady and substantial progress has been made since 1958, many thousands of potential college graduates still do not continue their education beyond high school. One recent study showed that in 1961, 37 percent of the students in the upper one-fifth of the graduating class failed to enter college.

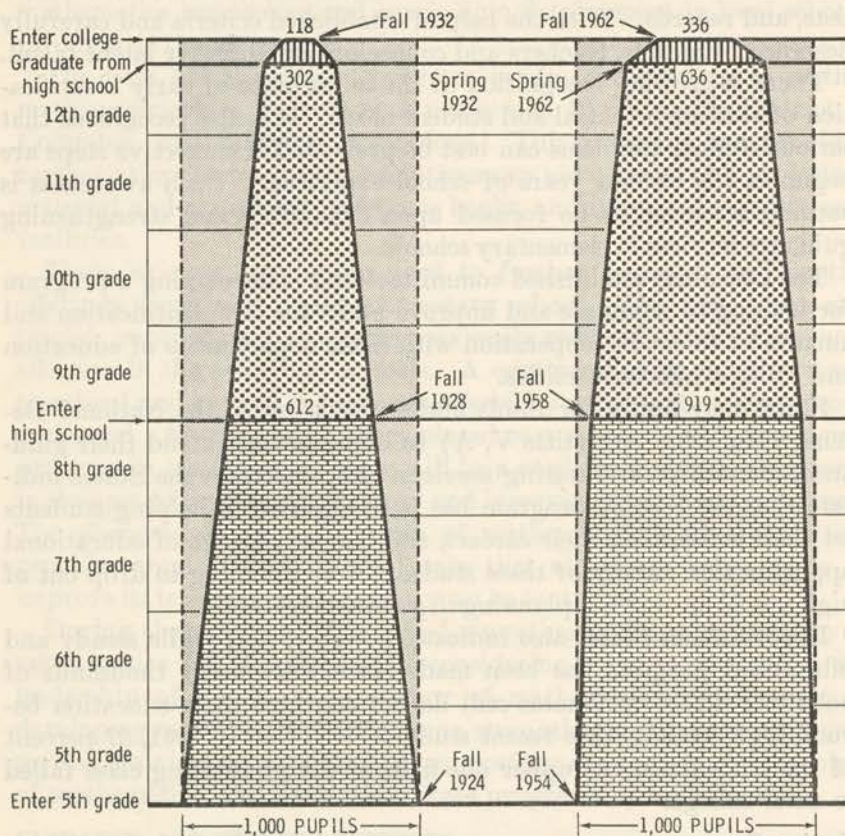
Testing Programs

The total number of tests administered during 1961-62 school year was 18,184,000, of which 6,436,000 were administered under NDEA. The number of secondary school students tested at least once under this program was approximately 77 percent of the secondary school enrollment in grades 7 to 12 inclusive. While testing is not an exclusive nor an infallible instrument for identifying talent, the contribution of the act toward the national effort in this direction is noteworthy.

Professional Personnel

The improvements in local guidance programs have been qualitative as well as quantitative. There has been a consistent move in the direction of upgrading State certification requirements for counselors. States report that secondary school students are receiving improved counseling services as a result of better qualified counselors and a more favorable counselor-student ratio. Most States have adopted as their

CHART 5.—APPROXIMATE RETENTION, FIFTH GRADE THROUGH COLLEGE ENTRANCE:
UNITED STATES, 1924-32 AND 1954-62



Note: Data are for 48 States and the District of Columbia.

Source: U.S. Department of Health, Education, and Welfare, Office of Education, *Biennial Survey of Education in the United States*.

goal a ratio of one full-time counselor for each 300 students. In 1958, the national ratio for all high schools was 1 counselor to 750 students as compared with the current ratio of 1 to less than 550.

Prior to NDEA (1957-58) the equivalent of approximately 12,000 full-time secondary school counselors served a public secondary school population of more than 10 million students. At the current rate of expansion in guidance, counseling, and testing programs, it is estimated that the number of full-time equivalent counselors in public secondary schools will have increased from 21,800 during 1961-62 to an approximate 33,000 counselors by 1964. Notwithstanding these gains, however, there is still an urgent need for additional qualified counselors to meet the increasing enrollment and to provide counseling services at the recommended ratio of 1 to 300. The projected increase

in enrollment for 1964 will require about 51,000 counselors, leaving an anticipated shortage by that date of more than 18,000 full-time equivalent counselors. Statistics indicate that there is a current shortage of more than 20,000 guidance and counseling personnel at the public secondary school level, and 2,200 at the undergraduate college level.

Even though full- and part-time professional guidance personnel in State departments of education increased from 99 in 1958 to 256 during the 1961-62 school year, additional State supervisory personnel will be necessary to provide more adequate supervision of local guidance and testing programs. The most recent statistics indicate that in addition to approximately 9,000 counselors employed in schools which are not participating in the NDEA program, only 256 full- and part-time State supervisory personnel are dealing with approximately 26,000 persons engaged in scheduled guidance activities in 7,229 NDEA-approved programs.

Higher Education

ADMINISTRATIVE PROBLEMS AND SERVICES

One of the basic responsibilities of the Office of Education is to provide services designed to strengthen higher education at regional, State, and institutional levels. Through the dissemination of the results of its own research and data gathering, the Office multiplies the effectiveness of all who are responsible for institutions and agencies of higher education. The Office stimulates through direct services furnished in response to specific requests by national and State agencies and organizations, and by individual institutions, and encourages progress also. The following examples will serve to illustrate the scope and thrust of such activity and services.

Statewide Survey.—During 1962, the Office was asked by the Governor and State Legislature of Hawaii to conduct a comprehensive survey of higher education in that State, including the University of Hawaii and five private colleges, to afford a blueprint for progress. The report of the findings and recommendations growing out of this survey will be completed in November 1962 and submitted for action by executive offices of the State government, the legislature, and the board of regents of the university.

Information on State Legislation.—The annual *Survey of State Legislation Relating to Higher Education* is extensively used by both individuals and organizations desiring information on the status of higher education legislation in the several States and Territories. The current issue was completed in March 1962.

Clearinghouse of Studies on Higher Education.—Since 1958 the Office of education has compiled, analyzed, and interpreted data on

educational research and experiments related to programs reported by colleges and universities and utilized by similar institutions, management consultants, national and regional educational committees and commissions, State and local education systems, private industry, and individuals engaged in educational research. In a number of cases, institutions unable to send representatives to the Office of Education clearinghouse have invited the Office to send a consultant to them. The concerns of the institutions, as reflected in their inquiries, encompass problems concerned with learning and teaching practices, institutional management, student personnel services, and professional education. The interests of international agencies and of foreign universities are to establish working arrangements with a source of information in this country that can continuously inform them of current developments in higher education in the United States.

Through the *Reporter*, issued on a recurring basis, recently completed research on higher education is identified, listed, and annotated. Through the various issues of the *New Dimensions* series, trends in research on timely subjects are reported in considerable detail. The usefulness of this series is evidenced by the substantial number of copies requested by colleges and universities, national and regional education agencies, and philanthropic foundations; copies are also requested as resource materials for conferences.

Institutional Organization and Administration.—The Office published and disseminated a research report entitled *Organization and Administration of Institutions of Higher Education*. This book describes and analyzes the organizational patterns of 608 institutions. It deals also with issues, techniques, and procedures involved in achieving efficient internal organization and administration of institutions of higher education.

Assistance in Accreditation and Institutional Research Efforts.—Utilizing its substantial file of institutional self-surveys and related materials, the Office has given wide assistance to colleges conducting their own surveys for accreditation purposes.

Interinstitutional Cooperation.—Cooperative undertakings by groups of institutions of higher education have become increasingly significant in recent years. In 1962, the Office of Education published *Cooperative Projects Among Colleges and Universities*, a report identifying and describing a number of such interinstitutional projects currently in operation. This publication was used as a basic resource item at two national conferences on higher education.

Consultative services.—A substantial part of the work of the Division of Higher Education during fiscal 1962 was devoted to providing consultative services to State governing and coordinating boards of higher education, as in Oklahoma, Kentucky, Colorado, and a dozen

other States, to nonpublic higher education boards and related agencies, and to other governmental and nongovernmental organizations and officials. Similar services related to matters of administration, planning, finance, and curriculum were furnished to institutional higher education boards and officials.

Organization and Administration of 2-Year Colleges.—The most dramatic developments in the 2-year college movement continue to be the rapid increase in the number of public junior colleges, the increases in enrollments in 2-year institutions of all types, and the heightened emphasis on developing 2-year college campuses and facilities. In the past 5 years, of the 90 new institutions of higher education established in the United States, 69 are 2-year institutions: 15 established in 1956, 11 in 1957, 19 in 1958, 10 in 1959, and 14 in 1960. Less dramatic than the expansion of these colleges, but perhaps equally important, is the improvement in their administration. In 1962, the Office of Education assisted in several ways in the strengthening of 2-year college administration. Included in the annual *Survey of State Legislation Relating to Higher Education* was a listing of State legislation affecting 2-year colleges. During the year, the Office also completed the data-gathering phase of a study, *Patterns of State Support for 2-Year Colleges*, and assisted in organizing and conducting a conference of State directors of 2-year colleges. A report of the conference appeared in the Office publication, *State Directors of Junior Colleges and Coordinators of State Systems of 2-Year Colleges*.

Business Administration of Higher Education.—In 1961-62 colleges and universities spent approximately \$7.2 billion for current operations and \$1.2 billion for additions to the plant, a total of \$8.4 billion. Although earmarked funds financed slightly more than one-third of the total expended for current operating purposes, such as auxiliary enterprises, organized research, and student assistance programs, there was considerable concern over the fact that no more than \$4.8 billion came principally from student tuition, Government appropriations, and gifts. By 1970 the cost of operating the institutions of higher education may be expected to reach an annual total of \$18.0 billion, with \$15.5 billion required to finance current operations and \$2.5 billion to finance capital additions. To help identify the magnitude of the economic problems of financing higher education and to examine the major issues involved, the Office prepared a publication entitled *Economics of Higher Education*.

Salary payments require about 60 percent of the total current operating expenditures of institutions of higher education. To note the significance of salary levels, the Office makes an annual study entitled *Higher Education Planning and Management Data*. The study has also furnished salary data for use in special areas, such as land-grant

colleges, State universities, junior colleges, and private colleges affiliated with religious denominations. Identification of sources of income and items of expenditure is obtained from a biennial study of income, expenditures, and property.

The *Casebook on Campus Planning and Institutional Development* reports the varied experiences of 10 institutions in building and expanding their campuses. This casebook was developed on the assumption that many higher education officials would be stimulated to do more effective planning by studying the experiences of others who had faced comparable problems.

A manual to assist those who have administrative responsibilities related to physical plant in making decisions regarding the rehabilitation, modernization, alteration, expansion, or abandonment of existing buildings is in preparation by the Office.

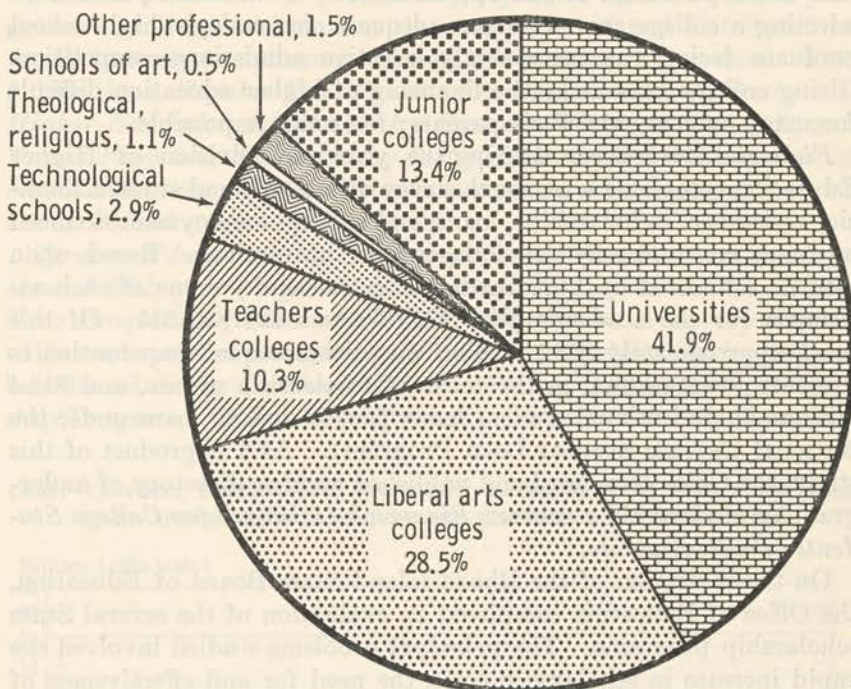
Urbanization and Higher Education.—The increasing urbanization of this country and the problems created thereby have caused the Office of Education to become deeply concerned with the effect of this social force on American education. During the year the Office of Education held a staff seminar based on a staff document setting forth the general characteristics, major problems, and noteworthy developments of higher education in urban settings. In addition to the rapidly increasing demand for higher education in the cities and the associated problems of physical and financial expansion, it seems that urban universities are finding it necessary to assume more and more responsibility for the social, cultural, and intellectual welfare of their communities.

Faculty Shortage.—The problem of increasing enrollments already described has led to a critical shortage of qualified teaching personnel in several important instructional areas. To assist in the solution of this critical problem, this office has undertaken a study to provide for institutions of higher education reliable estimates, by major field, of the demand for instructional staff during the next decade. Recurring studies provide data on faculty salaries, fringe benefits, and working conditions. It is expected that the Office of Education status and projections reports on faculty personnel will be useful to graduate schools in developing programs for preparing college teachers, as well as to the college and university officials who select and appoint college teachers.

STUDENTS AND CURRICULUM

Student Services.—In the fall of 1961 there were 3,891,000 students enrolled in American institutions of higher education, 1,026,000 of them (26.4 percent) enrolled for the first time. It is well known that even more students will be enrolled in the next 5-year period. As

CHART 6.—PERCENTAGES OF DEGREE-CREDIT STUDENTS ENROLLED IN VARIOUS TYPES OF INSTITUTIONS OF HIGHER EDUCATION: UNITED STATES AND OUTLYING PARTS, FALL 1961



Source: U. S. Department of Health, Education, and Welfare, Office of Education, Survey of Opening (Fall) Enrollment in Higher Education, 1961.

enrollments increase, the problems related to meeting the diversified needs of a larger and more heterogeneous student population will multiply at an accelerating pace.

Several activities of the Office of Education have been devoted to the study and solution of these problems. Staff members at the request of institutions have consulted with them on problems relating to student financial assistance and the management of their student service programs; two studies were undertaken: one analyzing institutional expenditures for student services and the other devoted to the staffing and administration of student services. Preliminary findings from the first of these studies indicate that exclusive of housing and other auxiliary enterprises, publicly controlled institutions of higher education annually spend for student services an average of \$38 per student. The comparable figure for privately controlled institutions is \$46 per student.

Information Services.—The rapidly increasing number and quality of high school students planning to enter college has added to the

complex problems related to college admission and financial assistance and has demonstrated the need for improved and expanded information about post high school opportunities. Traditional patterns of selecting a college are no longer adequate for today's high school graduate facing the increasingly selective admissions competition. Rising college costs make the financing of higher education difficult for many students and their parents; for some, impossible.

Financial Assistance.—During the year the Division of Higher Education completed a national survey of institutional student financial assistance—scholarships, loans, and student employment financed by funds controlled by the colleges and universities. Based upon returns submitted by 1,677 institutions, the total volume of such assistance for the academic year 1959-60 was \$211,011,345. Of this total, approximately \$98.5 million was disbursed as compensation to students, \$98.2 million in the form of scholarship grants, and \$14.4 million as institutional student loans (not including loans under the National Defense Student Loan Program). As a byproduct of this study, the Office completed and published another directory of undergraduate student aid resources, *Financial Assistance for College Students: Undergraduate*.

On the invitation of the Rhode Island State Board of Education, the Office of Education completed an evaluation of the several State scholarship programs. The principal problems studied involved the rapid increase in scholarship costs, the need for and effectiveness of certain categorical scholarships, the administrative problems of multiple scholarship awards, standards for renewals, institutional transfer of scholarship students, and the administration of the financial needs test in setting stipends. Following the preparation of extensive statistical and documentary materials, consultation, and conferences with educational leaders and groups, a report of the findings and recommendations for the improvement of the scholarship programs was presented to the board and the administrative staff of the State department of education in January 1962. The board accepted the principal recommendations of the report and proceeded with their implementation.

Graduate Study.—A report, *Doctoral Study: Fellowships and Capacity of Graduate Schools*, documents the number, value, type, and major source of graduate fellowships recently awarded by major universities in all principal academic fields. The report also concerns the capacity of graduate schools for further expansion and the principal barriers to such expansion.

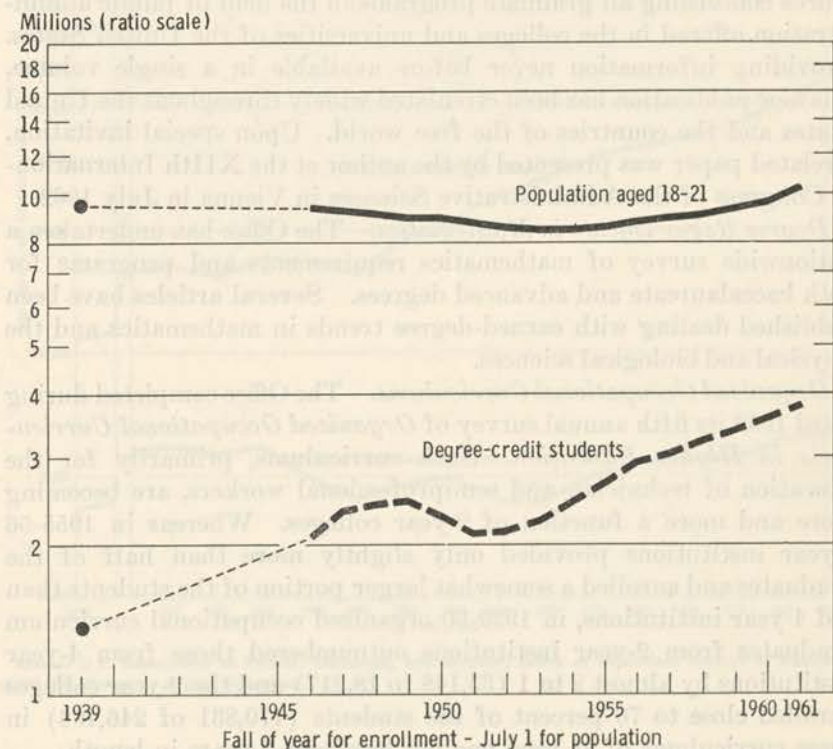
Two statistical reports have been prepared showing the number of students obtaining advanced graduate degrees from two major groups of institutions. The institutions are the 39 United States members

of the Association of Graduate Schools in the Association of American Universities and the 68 land-grant colleges and universities.

Summer Sessions.—A preliminary report of summer session programs in colleges and universities was prepared and distributed in April, in reply to numerous requests for summer-session data. Two publications, *Regular-Year Scholarship Programs of Institutions of Higher Education Applicable for Summer Session Study, 1960*, and *Travel Programs Sponsored by Institutions of Higher Education in Summer Sessions, 1960*, have been issued; three additional publications are in the final stages of preparation.

Teacher Education.—A major contribution has been made in the area of fifth-year programs of classroom teacher education: *Fifth-Year Programs of Classroom Teacher Education: A Survey Report*, will soon be off the press; meanwhile, three prepublication issues have been issued on the *Teacher Education Series*, "The Teaching Internship Program," "Fifth-Year Preservice Programs for Graduates of

CHART 7.—TOTAL DEGREE-CREDIT ENROLLMENT IN RELATION TO POPULATION AGED 18-21: UNITED STATES, FALL 1939 AND FALL 1946 THROUGH FALL 1961



Source: U.S. Department of Health, Education, and Welfare, Office of Education, *Surveys of Opening (Fall) Enrollment in Higher Education*.

Liberal Arts Colleges," and "Fifth-Year Programs of Classroom Teacher Education."

Toward the solution of problems in staffing higher education, the Office published a survey of placement services as a 2-part directory entitled *Placement Services for Personnel in Higher Education*. In addition to the directory it includes an analysis of the problems involved. It was used along with a parallel Office-developed working paper as basic material for a cooperatively sponsored professional conference.

Education for Public Service.—Following a series of meetings between the Commissioner of Education and the Chairman of the Civil Service Commission and their respective Washington and field staffs, a Committee on Education for Public Service was established within the Office of Education. This Committee will collaborate with representatives of the Civil Service Commission on educational programs designed to strengthen and improve Government service through the Government Employees Training Act.

Public Administration.—A 1961 publication, *Graduate Study in Public Administration*, became during 1962 a standard reference source concerning all graduate programs in the field of public administration offered in the colleges and universities of the United States. Providing information never before available in a single volume, this new publication has been circulated widely throughout the United States and the countries of the free world. Upon special invitation, a related paper was presented by the author at the XIIth International Congress of the Administrative Sciences in Vienna in July 1962.

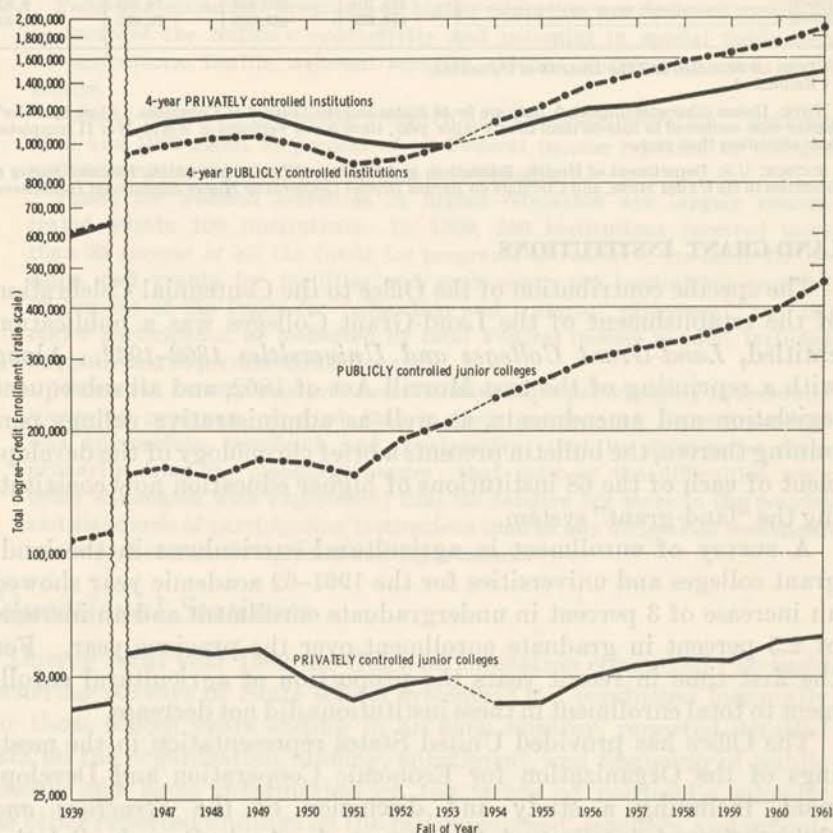
Degree Requirements in Mathematics.—The Office has undertaken a nationwide survey of mathematics requirements and programs for both baccalaureate and advanced degrees. Several articles have been published dealing with earned-degree trends in mathematics and the physical and biological sciences.

Organized Occupational Curriculums.—The Office completed during fiscal 1962 its fifth annual survey of *Organized Occupational Curriculums in Higher Education*. Such curriculums, primarily for the education of technician and semiprofessional workers, are becoming more and more a function of 2-year colleges. Whereas in 1955-56 2-year institutions provided only slightly more than half of the graduates and enrolled a somewhat larger portion of the students than did 4-year institutions, in 1959-60 organized occupational curriculum graduates from 2-year institutions outnumbered those from 4-year institutions by almost 2 to 1 (33,148 to 18,217) and the 2-year colleges enrolled close to 70 percent of the students (170,831 of 246,496) in these curriculums of at least one but less than 4 years in length.

Engineering Education.—The Office continued its annual study of engineering enrollments and degrees, leading to the publication *Engineering Enrollments and Degrees, 1961*. A report on transfers to schools or colleges of engineering was also published.

The Office also contributed to the preparation of a 3-volume publication, *Report on Education and Training of Professional Engineers*, prepared under the auspices of the Conference of Engineering Societies of Western Europe and the United States of America. It deals with systems of engineering education in the participating countries.

CHART 8.—TRENDS IN DEGREE-CREDIT ENROLLMENT FOR 4-YEAR INSTITUTIONS AND JUNIOR COLLEGES, BY TYPES OF INSTITUTIONAL CONTROL: UNITED STATES AND OUT-LYING PARTS, FALL 1939 AND FALL 1947 THROUGH FALL 1961



Source: U.S. Department of Health, Education, and Welfare, Office of Education, Surveys of Opening (Fall) Enrollment in Higher Education.

Table 4.—*Earned degrees conferred by institutions of higher education: United States, 1869-70 to 1961-62*

Academic year	Earned degrees conferred			
	All degrees	Bachelor's and first professional	Master's except first professional	Doctor's
1869-70	9,372	9,371	0	1
1879-80	13,829	12,896	879	54
1889-90	16,703	15,539	1,015	149
1899-1900	29,375	27,410	1,583	382
1909-10	39,755	37,199	2,113	443
1919-20	53,516	48,622	4,279	615
1929-30	139,752	122,484	14,969	2,299
1939-40	216,521	186,500	26,731	3,290
1949-50	496,874	432,058	58,183	6,633
1951-52	401,203	329,986	63,534	7,683
1953-54	356,608	290,825	56,788	8,995
1955-56	376,973	308,812	59,258	8,903
1957-58	436,979	362,554	65,487	8,938
1959-60 ¹	476,704	392,440	74,435	9,829
1961-62 ²	515,200	425,000	78,800	11,400

¹ Data for 50 States and the District of Columbia.² Estimated.

NOTE: Unless otherwise indicated, data are for 48 States and the District of Columbia. More bachelor's degrees were conferred in 1949-50 than in any other year, since many veterans of World War II completed their education that year.

SOURCE: U.S. Department of Health, Education, and Welfare, Office of Education, *Biennial Survey of Education in the United States*, and Circulars on *Earned Degrees Conferred by Higher Educational Institutions*.

LAND-GRANT INSTITUTIONS

The specific contribution of the Office to the Centennial Celebration of the establishment of the Land-Grant Colleges was a publication entitled, *Land-Grant Colleges and Universities 1862-1962*. Along with a reprinting of the first Morrill Act of 1862, and all subsequent legislation and amendments, as well as administrative rulings pertaining thereto, the bulletin presents a brief chronology of the development of each of the 68 institutions of higher education now constituting the "land-grant" system.

A survey of enrollment in agricultural curriculums in the land-grant colleges and universities for the 1961-62 academic year showed an increase of 3 percent in undergraduate enrollment and an increase of 2.5 percent in graduate enrollment over the previous year. For the first time in recent years the proportion of agricultural enrollment to total enrollment in these institutions did not decrease.

The Office has provided United States representation in the meetings of the Organization for Economic Cooperation and Development, including a study and discussion of the *Structure and Orientation of Intellectual Investments in Agriculture in Relation to Economic and Social Developments* in the 14 member countries.

FEDERAL PROGRAMS

In view of the Federal Government's extensive support of programs in higher education, it is important that the impact of its activities

in universities and colleges be clearly understood. Accordingly, the Commissioner of Education in February 1960 instituted a survey of Federal programs in higher education to consist of the following three parts: (a) A report on Federal programs in higher education and participating institutions, to be compiled on the basis of data from Federal agencies. (b) A study of the effects of Federal programs in 36 institutions of higher education. (Later contracted by the Office of Education to the Brookings Institution.) (c) Observations and recommendations on the Federal role in higher education based on the evidence of parts a and b as well as opinions of administrators of the programs.

A few of the preliminary findings of the director's report, which is nearing completion:

Federally sponsored programs in higher education are designed generally to increase the Nation's productivity and potential in special fields such as agriculture, health, national security, science, engineering, and world affairs.

Federal programs emphasize research and graduate education. Between 1955 and 1960 about 75 percent of all Federal income reported by colleges and universities was for research and development.

Funds for Federal activities in higher education are largely concentrated within 100 institutions. In 1959, 100 institutions received more than 93 percent of all the funds for programs of research, graduate fellowships, and grants for facilities and equipment; 100 institutions received 88 percent of the funds for "education and training" programs. The 100 major participants, as measured by total Federal income in 1960, included 54 public and 46 private institutions.

In general, faculty members and administrators participating in federally sponsored programs reported that in their opinion the Federal activity was appropriate, beneficial, and constructive; that its deficiencies arose primarily from its piecemeal nature; that most of the difficulties were being eliminated with experience; that its dangers lay more in the policies and standards of participating institutions than in any dictatorial tendencies on the part of Federal agencies and departments.

Educational Statistics

During fiscal year 1962 the Office of Education conducted two basic recurring surveys of State school systems: One, conducted biennially for those school years ending in an even number, reported detailed data on the organization, staffing, enrollment, and financing of public schools and basic information on the status of nonpublic schools; the other reported findings on the fall enrollment, teachers, and school-housing in the public schools.

Studies of local school systems provided data for reports on current expenditures per pupil, elementary and secondary school programs, teacher turnover, and the beginning public classroom teacher. The Office also developed projections of public and nonpublic ele-

mentary and secondary school enrollment, investigated the best possible methods for gathering meaningful statistics on school facilities, and provided advance estimates for college enrollments and resulting professional staff needs.

The Office continued its survey of nonpublic elementary and secondary schools resulting in a classified universe of the 4,000 secondary schools and a tentative group of some 13,000 elementary schools. From findings of these surveys, work was begun on a directory listing accredited and nonaccredited high schools.

A study of subject offerings and enrollments in private and parochial high schools was also launched. The data collected were largely comparable with similar information collected the previous year from a substantial sample of public secondary schools. In 1963 separate statistical reports will be prepared on the two levels of nonpublic schooling below college. At the same time, nationwide information on courses offered and the extent to which they are being utilized in both public and private schools will be available for the first time in 30 years.

The Office of Education conducts a broad and comprehensive program of statistical surveys in higher education. Needs are recognized both for prompt publication of data for immediate use and for analyses which require more preparation time. An example of a fast-moving survey, confined to only a few basic data items, is the annual survey of early fall enrollment. Data are collected as of late September and October, are reviewed and processed as received, and are published in early December. The publication gives for each of approximately 2,000 institutions the total enrollment of men and women students in work creditable toward bachelor's degrees and also the number of such students who are entering college for the first time. Both sets of figures are needed for establishing trends and projecting future changes.

Another effort to provide current data in higher education is the annual reporting of higher education data needed for institutional planning and management. Questionnaires were mailed to colleges and universities in July 1961 asking for information on student charges and staff and faculty salaries for the coming school year (1961-62). Institutional listings and summaries of the data were provided by type of institution, control, and region. This published report was supplied to administrative personnel in institutions of higher learning in September 1962.

New statistics prepared during the year included a projection of college enrollment which distinguished full-time enrollment for the first time and which analyzed the effect of increasing levels of education among parents on the college attendance rates of their children. Pro-

jections of earned degrees by major field of study were prepared for use in manpower studies stimulated by the Manpower Development and Training Act.

Other surveys included studies of engineering enrollments and degrees by field of concentration; graduate students enrolled for advanced degrees by field of study, years of study completed, and whether enrolled on a full-time or part-time basis; faculty and other professional staff by type of position; detailed financial statistics on receipts, expenditures, and property; junior-year enrollments in selected fields within the sciences, mathematics, and foreign languages; opening fall enrollment in degree-credit courses; data on organized occupational curriculums; and a detailed analysis of land-grant institutions, showing enrollment, degrees conferred, faculty, current-fund income and expenditures, and plant assets and obligations.

Sponsored Research

COOPERATIVE RESEARCH PROGRAM

During fiscal year 1962 the Cooperative Research Program assumed an expanded national role in pursuance of its charge to stimulate and support the study of problems facing American education. The Program's support for basic and applied research continues to provide a source of new knowledge and new applications of existing knowledge on an ever-increasing variety of topics at all levels. A study completed during this fiscal year, for example, revealed that up to 44 percent of some teachers' verbal behavior in the classroom was devoted to the control of pupils. Such behavior is believed to impede rather than facilitate learning. Although the researcher who conducted this study believes that little can be done to change the behavior of teachers who emphasize control, instruments now available could be used to screen out teacher training candidates who are likely to exhibit such behavior.

Research proposals in all areas continued to be received in increasing quantity and improved quality. Projects approved covered a wide range of topics and problems of import for education, as indicated by the following examples: Academic achievement of adult students; the technology of programmed instruction; comprehension of rapid speech by the blind; dynamics of personality development during the college years; relationship of group counseling to academic performance; development of sensitivity to esthetic values; community attitudes toward educational change; financial analysis of college operations; cross-national study of educational attainment; retraining of unemployed workers.

During fiscal year 1962 the Cooperative Research Program paid increasing attention to the problem of reducing the tremendous time lag that occurs between the results of research and their application in the classroom. In addition to continuing to distribute brief descriptions, summaries, and monographs, the Program made arrangements with the Library of Congress to have final reports of projects microfilmed. Microfilmed copies of many reports are now available through the Library of Congress to interested individuals at a modest fee.

Two crucial areas requiring a concentration of research and development efforts were identified in this fiscal year: the teaching of English and the utilization of talent.

Project Talent

The purpose of this program of research and demonstration is to attack the deplorable condition which allows 70 percent of the talented young people in the United States to remain unidentified and dormant. Following research conferences, seminars, and research development contracts, basic and applied research and demonstration studies in this area are now underway with support from the Cooperative Research Program.

As a major effort in Project Talent 440,000 secondary school children throughout the country are being tested, studied, and followed through their school experiences. Some of the results now available indicate, for example, that when the same achievement tests are given to children in the ninth grade and twelfth grade, the upper 25 percent of the ninth-grade students score higher than the average twelfth graders. This of course has important implications for curriculum planning.

Illustrative of other studies in the utilization of talent are projects to determine the value of various problem-solving strategies and to follow up on the career patterns of college graduates. As a part of the latter program a research development conference was held to review and reassess research aimed at devising better tests to measure creativity, problem-solving ability, and underachievement.

Project English

English is basic to all other fields of study and important as well in the adult lives of all American citizens. Through research, improvement of teacher preparation, and dissemination of what is already known about effective teaching materials and practices, "Project English" is intended to support and extend the work already being done on the local and State levels by various professional organizations. It is not in any way an attempt by the Federal Government to control the content of the curriculum.

An increasingly important feature is the collaboration between staff members of departments of English in colleges and universities and their counterparts in colleges of education, State education departments, and elementary and secondary schools.

Curriculum Study Centers.—The purposes of these centers are (a) to redefine the nature and aims of the English curriculum at all levels, (b) to develop instructional methods and materials that will achieve specific aims, (c) to experiment with, evaluate, and revise these methods and materials, and (d) to disseminate information concerning the most promising methods and materials.

Six centers have been established. One, at the Carnegie Institute of Technology, will develop and test a curriculum for all college-bound students in grades 10, 11, and 12. A second, at Northwestern University, will work on a sequential curriculum for all students in grades 7 to 14, with special emphasis on composition. The third, at the University of Nebraska, will also stress composition, but will cover all grades from kindergarten through the first year of college. The fourth, at Hunter College, called "Gateway English" by its initiators, proposes to develop and try out English materials for children from culturally deprived urban environments. It will concentrate on teaching reading in grades 6 to 11 (with special emphasis on the junior high school years), but will devote some attention to speaking and listening. Another center, at the University of Minnesota, is to prepare and evaluate curricular materials for grades 7 to 12. The sixth, at the University of Oregon, will direct its efforts toward improving the curriculum in language, literature (including reading), and written and oral composition in grades 7 to 12. Each center has secured the cooperation of a number of elementary or secondary schools in its area. Its study will continue for approximately 5 years, after which it will make its reports available to all interested schools.

Basic and Applied Research.—Twelve research studies are under way in Project English. These deal with such important topics as the teaching of reading, the development of unfamiliar concepts, the implications of linguistics for the junior high school, the relationships between grammar and writing, the teaching of the blind and the deaf, and ways to alter nonstandard dialects.

Research Planning and Development.—A conference on needed research in the teaching of English, involving approximately 50 leaders of the profession, has made it possible to proceed more systematically than before in planning and conducting research. Another conference, on English for the culturally different, has focused attention on the special needs of substantial numbers of American students. A study of the relationship between the language of children and that in their textbooks has been completed. Under way are a study of the

state of knowledge in the teaching of composition and the preparation of a series of annotated bibliographies on research in the teaching of reading. From Project Talent, Project English is obtaining much statistical information available nowhere else. Finally, Project English authorized a detailed evaluation of the English institutes sponsored in the summer of 1962 by the Commission on English of the College Entrance Examination Board.

Project Social Studies

During the year the Office planned Project Social Studies, which will be launched in fiscal year 1963. This project is a substantial effort to improve the curriculums and teaching of the social sciences, elementary, secondary, and higher. Like Project English, this undertaking will endeavor to make a significant improvement in teaching in this critical curriculum area through research and through broad dissemination of information about effective teaching practices and materials.

NEW EDUCATIONAL MEDIA

Research

Of the 175 applications submitted for research grants on the educational uses of the new communications media during fiscal year 1962, the Advisory Committee on New Educational Media recommended for support 34 projects in 23 institutions of higher education, 3 non-profit private agencies, and 1 State department of education. These projects were located in 11 States and the District of Columbia. The 34 grants bring the total number of approved projects since the program began to 184, of which 62 have been completed, 20 during fiscal 1961 and 42 during fiscal 1962. In addition to the research grants, four research contracts were negotiated during the fiscal year.

Of the \$9.9 million obligated for research from the beginning of the title VII program of the National Defense Education Act through 1962, approximately \$2.5 million was obligated for research grants and contracts during fiscal 1962. Approximately \$950,000 was obligated for the newly approved projects; the remaining \$1.55 million was available for continuing projects. A majority of the approved research grants focused on finding more effective ways of programing instructional materials in teacher education, the humanities, mathematics, and the social and physical sciences.

For the first time, the advisory committee in 1962 recommended the activation of title VII contract provisions for research, since it had become evident that certain selective studies of major research issues can be implemented more effectively through contracts than through a grant program based solely on a variety of investigator-initiated projects. As a result, two types of contractual activities were sup-

ported this year, in addition to the continuing research-grant program. These contracts represent the first of a series of contemplated research studies on the relationship of the educational media to fundamental issues in human learning.

The first contracts involved two studies on the feasibility of establishing regional centers for programmatic research on the role of new media in education. One study was conducted by Pennsylvania State University in cooperation with other universities throughout the country, the second by the Oregon State Department of Education in cooperation with other State departments of education.

Another contract research activity consisted of two long-term projects, one involving the relationship of media to the psychological process of transfer of learning and the other concerning the influence of educational media on the role of the school as a social organization. These contracts have been arranged with the Colorado State University Research Foundation and the University of Chicago, respectively.

Dissemination of Information

Slightly more than \$2.2 million was obligated for the support, under contract, of dissemination activities during fiscal year 1962. Approximately \$500,000 of this was for continuation costs of projects contracted for in previous years. During the past fiscal year, 32 contracts were negotiated with 28 institutions, agencies, and individuals in 15 States and territories, at a cost of almost \$1.75 million. An estimated \$350,000 in additional support will be needed during fiscal years 1963 and 1964; thus, it is estimated that these 32 contracts will require approximately \$2.1 million for completion.

During fiscal 1962, a major emphasis under title VII activities was placed on studies and dissemination activities relating to the future of educational television in the United States. Early in the year a comprehensive document entitled, *Education: The Next Ten Years*, was published. This was a report of several task forces operating under the general direction of the Stanford Institute of Communication Research, which summarized the thinking of outstanding specialists in the United States as to the future of educational television in the United States during the next 10 years, including the Nation's needs for better educational television programing, resources and facilities, financing, and operating personnel.

In addition, major studies were initiated to explore problems of copyright, royalty, and compensation of teachers in the educational television field (through contract with the American Council on Education); to study in depth the personnel needs of educational television in the future, and to examine the nature of the personnel pool available for new stations (under contract with the National Associa-

tion of Educational Broadcasters); and to study the economics of educational television now and in the future (contract with Brandeis University, Boston). As part of a major survey conducted under contract by the National Association of Educational Broadcasters to ascertain the needs of education for new television channels in the future, a comprehensive report was issued complete with engineering maps and charts indicating areas where new channels would be needed in order to offer complete nationwide educational television coverage. These data are presently being further refined, with the use of electronic digital computer methods, to assist State and local authorities in planning for the use of Federal matching funds for new stations under Public Law 87-447.

During the year, a demonstration was conducted by the WGBH Educational Foundation (Boston) to show the use of FM radio networking to facilitate the conference technique of communicating among institutions of higher education. Many of the major universities in the northeast States shared in a series of conference activities on each campus via this unique educational FM network, established on a pilot basis for the demonstration.

For example, students participating in a nonwestern studies program at institutions in the Boston area have been able to listen to and ask questions of lecturers at Brandeis, Harvard, and the Massachusetts Institute of Technology. In one program of another series on "The Challenge of Higher Education," the presidents of MIT, Amherst, Pennsylvania State University, and Johns Hopkins were able from their own institutions to participate in a discussion moderated by James Killian of MIT.

A second major emphasis during fiscal year 1962 continued to be programs to make new-media materials more accessible and available to institutions of higher education, to school systems, and to teachers. In the television area, three pilot television materials libraries were established, one regional library for the Great Plains States at the University of Nebraska, another one for the New England States at the Eastern Educational Network in Boston, and a national library at the National Educational Television and Radio Center in Washington to work closely with the regional libraries and to serve States where no pilot regional library now exists. Before these pilot demonstration libraries were established, there was no mechanism by which the various stations could locate or exchange instructional television materials.

Also during fiscal 1962, the title VII program issued the first comprehensive catalog or annotated bibliography of programmed instruction materials available for distribution during the 1962-63 school year. Prepared under contract by the Center for Programed In-

struction in New York City, the book listed over 122 courses or segments of courses in programmed instruction form, complete with a sample of two or three pages of the program. Similarly, a series of status papers were issued under the Technological Development Project (National Education Association), including a catalog of teaching machines presently on the market and a critical analysis of systems of instruction used in the Armed Forces, industry, some institutions of higher education, and school systems.

Well underway during 1962 was the preparation of the country's first comprehensive "educational media index," a cross-reference directory of available educational media materials including films, filmstrips, slide sets, teaching machine materials, sets of charts, kinescopes, videotapes, voice recordings, etc. The directory is being prepared under the general supervision of the Educational Media Council, using latest automatic data storage and retrieval equipment, through a sub-contract with a textbook publisher.

A third major emphasis during the year was a concern for improved teacher and professional education in the educational media field. With the help of title VII funds, the Florida State Department of Education has conducted a demonstration workshop in new media for methods teachers in the various teacher-training institutions in Florida. The Texas State Education Agency has continued its demonstration of teacher teams and institutes for the inservice training of teachers in that State. The University of Pittsburgh has conducted demonstration workshops in the use of the overhead projector in a new technique of teaching English composition in large group classes. Alameda State College in California is undertaking a series of seminars to establish content and pattern guidelines for the professional training of teachers and specialists in new media techniques.

A continuing emphasis under the program is the dissemination of information concerning research conducted not only under the title VII program but also by other research groups. A pilot project at Western Reserve University for classifying, storing, and retrieving research information in the field of education with the use of automatic data processing equipment, now includes abstracts of research undertaken since 1920.

Exhibits were used for the first time under the title VII program in 1962 with the partial support of a library exhibit at the Seattle World's Fair. Educational media resources of the school library of the future were demonstrated at this exhibit. A contract was also signed for an exhibit on programmed instruction and teaching machines to be shown at major professional meetings and conventions throughout the United States in 1963.

Other contractual arrangements in 1962 involved a major new film series on communication theory and the educational media being prepared by Ohio State University; several guideline conferences, including one on new media in guidance and personnel work, in cooperation with the American Personnel and Guidance Association; a national conference on new media and extension education conducted through the University of Nebraska; a regional conference on educational television convened by the Western Interstate Commission on Higher Education.

The first in a series of advisory and assistance contracts was let in 1962. These are small contracts to help an institution, school system, or State department of education acquire consultant services and send staff members on observation tours in connection with the planning of unique programs using the new media. The first of these contracts provided for a survey of audience response systems, leading to the design of certain of the facilities for the University of Miami's new Communications Building. The second was a contract to Stephens College to assist in the design of physical facilities for their new Learning Center, to serve the whole campus with a coordinated media program. Reports of these advisory and assistance contracts will be published for the interest of others who have similar problems.

Educational Assistance Programs

The Office of Education has under way a program to increase its capacity as a center for information and analysis of Federal programs in education. Two major studies of Federal programs and funds in education have been completed. In addition to *A Survey of Federal Programs in Higher Education*, reported in the section on higher education, the Office has published *Federal Funds for Education: Fields, Levels, and Recipients, 1959 and 1960*. This publication reports for the first time the amounts of money involved in the educational programs of the various Federal departments and agencies and gives a detailed breakdown of the academic field and level to which the funds are directed. It also reports the numbers of students receiving assistance from those programs in which individual recipients can be identified.

New Federal Legislation

Legislation affecting education passed in fiscal year 1962 included the following:

Public Law 87-274 (Juvenile Delinquency and Youth Offenses Control Act), approved September 22, 1961, authorizes the Secretary of the Depart-

ment of Health, Education, and Welfare to make grants for a 3-year program of pilot projects and training programs. The Office of Education has the responsibility for evaluating and giving technical counsel on the education phase of applications for juvenile delinquency grants under this law.

Public Law 87-276 (Training of Teachers of the Deaf), approved September 22, 1961, administered by the Commissioner of Education, authorizes a 2-year program of grants to accredited public and nonprofit private educational institutions that are approved training centers for teachers of the deaf and for scholarships for qualified students.

Public Law 87-344, approved October 3, 1961, extended for two additional years Public Law 85-864 (National Defense Education Act of 1958) and Public Laws 815 and 874, 81st Congress as amended (school construction and payments to school districts in federally affected areas).

Public Law 87-415 (Manpower Development and Training Act) approved March 15, 1962, authorized the Secretary of the Department of Health, Education, and Welfare to enter into agreements with States under which State vocational educational agencies assist in providing retraining programs for unemployed workers possessing obsolete skills.

Public Law 87-447 (amending the Communications Act of 1934), approved May 1, 1962, authorized a 5-year program of grants on a matching basis to State and local agencies to help increase and improve educational television transmission facilities.

Federally Impacted Areas

Public Law 815.—Under Public Law 815, from fiscal 1951 through 1962, the Congress appropriated \$1,081 million for school construction on Federal property and in districts with increased enrollment resulting from Federal activity. State and local sources added an estimated \$670 million, making a total of approximately \$1.8 billion to house more than 1.6 million children.

During fiscal year 1962, Federal funds were reserved in the amount of nearly \$64 million for 211 school districts to construct 263 projects under Public Law 815. To these funds the school districts added \$45 million. The total will be used to construct 3,027 classrooms and related facilities for 85,844 children. In addition, the Federal Government authorized construction during fiscal year 1962 for 20 projects located on Federal property which will provide 150 classrooms to house an estimated 4,625 children.

Public Law 874.—In fiscal year 1962, 4,065 school districts were found eligible for approximately \$233 million in Federal funds for current operating expenses of schools authorized under Public Law 874. These funds were paid on account of 1.7 million federally connected children. The 4,065 eligible school districts receiving this assistance had an estimated attendance of 11,171,284 children, about one-third of all public elementary and secondary school children in the Nation. In addition, a little over \$13 million was allocated to

Table 5.—Grants and other financial assistance to States, administered by the U.S. Office of Education, fiscal year 1962¹

States and outlying parts of the United States	Total	Colleges for agriculture and the mechanic arts	Cooperative vocational education	Maintenance and operation of schools (Public Law 874)	School construction (Public Law 815)	Library services	Defense educational activities	Mentally retarded
Total.....	\$398,036,000	\$14,519,000	\$40,178,617	\$226,307,926	\$42,084,492	\$8,106,654	\$85,833,507	\$915,804
Alabama.....	9,249,636	205,079	990,741	5,368,962	1,579,099	184,761	909,952	11,042
Alaska.....	8,667,002	144,506	105,085	6,573,061	1,694,182	40,000	105,268	4,900
Arizona.....	6,592,762	165,941	220,026	4,714,093	831,264	79,538	588,990	13,000
Arkansas.....	5,487,674	175,585	727,818	1,250,882	370,047	140,200	2,801,142	43,709
California.....	49,273,741	453,113	2,208,211	34,127,084	8,845,911	250,030	3,333,692	40,054
Colorado.....	10,183,569	174,942	344,140	8,401,913	8,744,494	85,259	391,857	22,233
Connecticut.....	1,183,944	190,506	401,206	2,321,080	1,187,099	105,423	704,385	22,233
Delaware.....	1,323,575	148,891	193,501	694,462	1,187,099	62,005	217,913	11,643
District of Columbia.....	348,393	238,643	130,480	6,190,914	736,135	155,938	1,985,848	35,800
Florida.....	10,111,498	218,553	1,081,943	5,180,019	1,011,844	212,827	1,980,911	12,564
Georgia.....	9,730,897	3,627,095	184,230	4,448,245	922,888	54,000	411,006	32,950
Hawaii.....	9,978,681	158,992	245,259	1,635,960	894,052	74,029	23,663	13,000
Idaho.....	2,481,514	340,833	1,702,063	3,991,894	380,899	231,158	2,811,424	13,000
Illinois.....	4,051,821	232,885	1,091,390	1,116,332	103,617	405,552	1,103,897	13,812
Indiana.....	4,025,773	194,935	887,088	5,800,869	34,673	167,096	1,299,835	20,450
Iowa.....	2,387,153	183,402	502,000	1,369,394	884,602	76,721	785,488	9,800
Kansas.....	6,882,532	200,525	1,043,741	1,935,910	46,921	205,363	1,055,508	11,209
Kentucky.....	3,884,331	204,885	894,334	1,935,910	296,486	137,418	979,181	10,600
Louisiana.....	3,194,848	159,309	288,375	1,935,910	296,486	85,752	227,422	11,209
Maine.....	2,996,968	159,309	288,375	1,935,910	296,486	85,752	227,422	11,209
Maryland.....	11,639,456	201,771	487,335	8,442,404	1,226,706	173,999	1,096,241	11,000
Massachusetts.....	11,807,828	242,668	790,604	6,897,332	1,783,395	100,898	2,074,731	8,100
Michigan.....	9,692,811	295,851	1,451,963	1,894,389	1,490,415	244,534	4,261,859	33,800
Minnesota.....	3,217,555	208,010	925,875	1,476,446	216,902	173,045	1,181,877	35,400
Mississippi.....	3,881,011	183,392	910,428	1,472,551	689,394	173,202	440,644	11,400
Missouri.....	6,148,591	226,058	1,099,557	2,630,359	465,058	178,493	1,567,266	7,300
Montana.....	3,187,370	153,443	209,056	1,779,085	928,775	73,006	36,705	12,867
Nebraska.....	4,612,368	168,116	426,436	2,777,929	616,734	103,329	506,955	10,600
Nevada.....	2,599,947	145,083	187,272	1,454,329	575,445	51,500	175,118	12,200
New Hampshire.....	2,017,355	152,091	106,675	1,241,875	94,614	64,845	285,055	12,200

New Jersey.....	8,938,907	260,860	821,993	5,033,997	379,902	102,236	2,321,569	18,350
New Mexico.....	7,544,939	158,946	229,030	4,915,534	1,626,571	71,851	632,325	10,682
New York.....	15,054,677	474,331	2,533,312	6,047,882	462,970	280,484	5,167,210	88,488
North Carolina.....	9,066,815	230,766	1,575,466	2,643,686	962,365	310,305	3,332,827	11,400
North Dakota.....	2,492,965	152,699	300,483	824,356	535,294	66,348	573,315	10,000
Ohio.....	12,538,008	333,367	1,881,780	5,216,913	522,553	294,172	4,278,223	11,000
Oklahoma.....	10,327,971	186,383	647,009	7,289,031	611,861	134,745	1,424,342	34,600
Oregon.....	3,324,094	175,235	413,665	1,065,479	161,405	105,614	1,376,830	24,866
Pennsylvania.....	10,983,437	365,500	2,206,709	5,080,480	1,610	670,462	2,603,353	56,333
Rhode Island.....	2,760,116	157,122	168,172	1,909,874	205,413	84,548	226,087	8,900
South Carolina.....	6,583,910	187,465	758,009	3,596,961	734,615	250,039	1,056,821	11,400
South Dakota.....	3,952,873	153,557	278,494	2,182,508	1,169,399	80,565	76,950	33,933
Tennessee.....	5,511,278	211,062	1,126,226	2,355,447	66,000	207,063	1,511,547	27,100
Texas.....	19,323,914	330,843	1,885,982	13,234,662	2,660,877	331,190	853,260	11,319
Utah.....	3,685,580	157,743	192,416	2,170,042	657,662	61,932	434,466	299,823
Vermont.....	736,501	147,767	187,793	37,568	1,050,776	63,550	1,542,117	19,600
Virginia.....	18,675,273	219,028	1,041,996	14,688,827	212,929	212,929	1,299,512	22,967
Washington.....	11,870,037	196,841	603,848	8,766,325	851,770	128,774	847,773	10,600
West Virginia.....	1,920,531	177,063	594,047	9,256	650,705	180,303	1,756,349	36,600
Wisconsin.....	4,581,508	218,726	997,420	741,405	397,144	106,364	37,082	4,942
Wyoming.....	1,679,842	146,575	167,872	819,893	815,563	14,247	54,770	537,669
Guam.....	1,762,408	57,582	820,336	81,518	11,382	66,354	10,600	36,600
Puerto Rico.....	1,730,009	186,807	843,307	10,872,405				
Virgin Islands.....	204,270	45,016	45,016					
Undistributed.....	10,872,405							

¹ On a check-issued basis. Does not necessarily agree with allotments or expenditures for a given year.

² Includes in "Undistributed" payments made to Army \$6,904,412; Navy \$1,988,647; Air Force \$1,979,515; and Veterans Administration — \$169.

³ Does not include amounts paid for loans and repayable advances or amounts paid to institutions under the National Defense Education Act, \$115,514,723; or to jurisdictions other than States to assist Cuban refugees in educational pursuits, \$5,186,011.

⁴ Includes \$3,775,000 special land-grant college aid paid under Public Law 86-624.

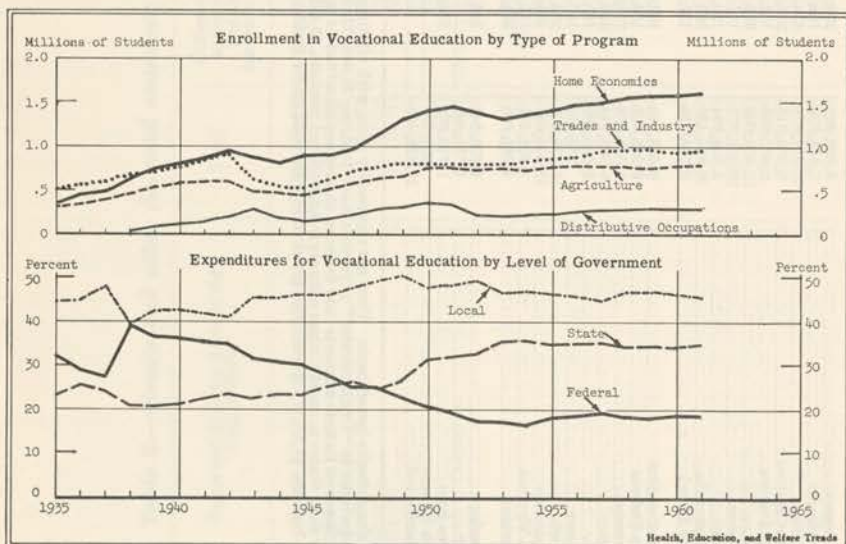
other Federal agencies to provide school services for 38,000 children residing on Federal property. A total of \$247 million was appropriated for this program in fiscal year 1962. Over \$1,426 million has been appropriated for this program since its enactment in 1950.

Vocational and Technical Education

The Federal Government and the States cooperate in the administration of programs of vocational education of less than college grade. The controlling purpose of vocational education is to fit persons for useful employment. Under authorization of the Smith-Hughes Act of 1917, the Vocational Education Act of 1946, usually referred to as the George-Barden Act, and supplementary legislation enacted since 1917, Federal funds are available for allotment to the States and insular and territorial possessions for vocational education in agriculture, distributive occupations, home economics, trades and industry, practical nursing, fisheries occupations, and for area vocational education programs for the training of highly skilled technicians.

The needs of two distinct groups of people are served by programs conducted under the provisions of the Federal acts: those who have entered upon, and those who are preparing to enter upon the work of various occupations in these fields. Vocational education programs provide training for young persons in regular day schools and for out-of-school youth and adults, both employed and temporarily

CHART 9.—VOCATIONAL EDUCATION ENROLLMENTS AND EXPENDITURES: UNITED STATES, 1935-65



Source: U.S. Department of Health, Education, and Welfare. *Health, Education, and Welfare Trends, 1962.*

unemployed. This Federal-State cooperative endeavor is based upon the fundamental ideas that vocational education is in the national interest and is essential to the national welfare, and that Federal funds are necessary to stimulate and assist the States in making adequate provisions for such training.

AREA VOCATIONAL EDUCATION

Recent studies pertaining to programs for the training of highly skilled technicians authorized by title VIII of the National Defense Education Act of 1958 emphasize the need not only for larger numbers of highly skilled technicians to support engineers and scientists, but also for technicians with an increasing knowledge of scientific and mathematical principles and their applications. Vocational educators have been concerned with improving the quality of instruction in these programs, and emphasis has been placed on the depth and rigor of the curriculums in the preparation, upgrading, and updating of technical personnel.

It is estimated that 50,000 persons were enrolled in preparatory programs and 100,000 in extension programs during fiscal year 1962, an increase of 150 percent since the area program began in 1959. Ten States report 70 new area schools in the planning stages, under construction, or already completed, and other States are expanding or improving their present facilities.

The number of extension enrollments each year and in the scope and extent of extension training in the total technical program is indicative of the rapid changes in industrial technology and the need of technical workers to keep pace with the rapid developments in their fields. The role of extension training programs in the industrial complex is illustrated through the recent experience of the aircraft industry with the changeover to missile production. Extension courses were developed to retrain technical workers for new jobs with a minimum disruption of employment and consequent effect on the local economic situation.

The first group of technicians was graduated from 2-year preparatory programs in June 1961. A report of the placement of these graduates indicates that the average wage rate for those who were placed in the technical field for which they were trained was \$4,600 for graduates of 2-year post high school programs, and \$4,200 for those graduated from high school technical programs.

The recruitment of instructors for courses in programs for the training of highly skilled technicians continued to pose serious problems to the States and local communities. Only a few communities have been successful in attracting qualified teacher personnel from industry whose background included engineering or technical institute education and advanced technical employment experience.

Progress has been made in the training of teachers of technician training courses. Some of the States report summer institutes to update the technical competencies of instructors; elsewhere, teacher training institutions offered industrial educational curriculums with an applied technology option.

The States and local communities conducted studies, frequently in cooperation with other interested agencies and groups, to determine the need for technicians, to define job clusters in technical occupations, and to evaluate students' interest in preparing for employment as highly skilled technicians.

TRADE AND INDUSTRIAL EDUCATION

Trade and industrial education programs were attended by slightly in excess of 1 million secondary school youth and adults during this past year. Reports from the States suggest that the number of employed adults seeking job upgrading and retraining opportunities in programs of vocational education is on the increase.

Occupational transition programs are being initiated at an accelerated rate. These are designed to retrain employed workers from dead-end type jobs for other occupational areas before unemployment becomes a reality. There are evidences of growth in these training programs.

Several States are in the process of developing statewide courses of study in some of the occupational categories in which trade preparatory training programs are offered. Summer workshops involving instructors, supervisors, and teacher-training personnel have been conducted for the purpose of developing courses of study. This activity is often supplemented by regional and area workshops and conferences in which the services of experts from industry are utilized to bring to the education group the latest techniques and industrial methods.

Rapid technological advances have caused a decided impact on enrollments in trade extension programs. Skilled workers must return to the school for training at regular intervals to keep up with the ever-changing demands of industry. Sizeable enrollment advances are occurring in many of the more complex occupational areas.

After a leveling-off period during recent years, enrollments in related classroom instruction for apprentice training have increased; trade and industrial educators, along with management, labor, and various government agencies, have provided the impetus to this movement. National studies indicate that the number of apprentices being trained should be several times the present rate to fill existing needs for skilled artisan replacements. Both management and labor have assisted educators in formulating programs of related instruction for

apprentices. Many schools conduct related instruction classes in excess of the minimum 144 hours of required extension instruction per year.

Placement potential in the service occupations far exceeds the number of persons currently in training. Air conditioning and refrigeration, to name but two areas, are in need of a substantial number of new workers each year. Many programs are being broadened to include training opportunities in service occupations currently in demand. Representatives of several industries have given generously of their time, talent, and equipment to vocational schools to help educators assure success in these programs.

The number of practical nurse education programs continues to increase. The national demands for more and better nursing services, as well as for other health services, has attracted the immediate attention of trade and industrial educators having a responsibility for program promotion and development. Many graduates of these programs are offered positions before they complete their courses of study.

DISTRIBUTIVE EDUCATION

Distributive education is a program of instruction in marketing, merchandising, and management. Availability of instruction is limited by provisions of the national vocational education acts to persons already employed in distributive occupations. Instruction, therefore, has been developed around four categories of need—employee updating, employee upgrading, career development, and operational management.

Current emphasis is being directed to the improvement of teacher-education programs, and to the encouragement of needed research. Conferences and publications have emphasized the activities which can be developed at State and local levels to improve preservice and inservice teacher education. States have been encouraged to place greater emphasis on the subject matter fields, including economics, marketing, and management, in the preparation of teachers. Research projects have been undertaken by State agencies and through the facilities of universities and colleges. One of the most encouraging developments has been the fact that many practical research projects conducted by local teacher coordinators have resulted in new approaches to teaching distributive subjects.

AGRICULTURAL EDUCATION

The character of agriculture has changed and is continuing to change rapidly. No longer does the term agriculture encompass only the actual producing of crops and livestock; it now includes many closely associated occupations.

Vocational education in agriculture must be sensitive to economic, social, and technological factors affecting farming. Changes that involve these factors include new methods of processing and distributing farm products; marked progress in the mechanization of farming, advances in the use of labor saving devices; applications of science to farming in the areas of plant growth, soil conservation, and the conservation of other natural resources; improvement in the breeding of livestock; widespread use of artificial insemination; use of hybrid varieties and strains of seed; utilization of fertilizers; use of herbicides, pesticides, and antibiotics; the application of improved farm management practices; and the availability and use of farm credit resources. These and other steps in more efficient farming have made it possible for 1 farmer today to feed himself and approximately 25 others, thus making it possible to produce the goods and services needed by the rapidly expanding population.

Agriculture is one of the primary areas of scientific research and discovery. In 1962, the amount spent for agricultural research was approximately \$275 million of Federal and State funds. Approximately the same amount was spent by industry. The accumulation of research findings thus made possible would, however, be of little value if not communicated to farmers and put to use on their farms. Vocational agriculture programs have had, and should continue to have, an important role in helping farm youth and farmers understand and use the information made available by this extensive research.

There is a need for greater competence on the part of those who farm if they are to be successful in attaining an economic status comparable to that of persons engaged in other occupations. This requires an effective program for full-time day school students and a greatly expanded program through the public schools for upgrading young and adult farmers in extension programs. Even though the number of farms is declining, not enough students with 3 or more years of training in vocational agriculture are graduating each year and entering upon farming to replace the farmers who retire or otherwise leave this field of work.

OFFICE EDUCATION

The office education program is concerned with the second largest employment group in the United States—the more than 10 million persons who work in offices, or better than 15 percent of the employed. The primary goal of the program, to help meet national manpower needs by developing the maximum skill potential of those persons who will follow an office career, serves both the individual and society. The Office of Education for this purpose provides consultative service to States and encourages the development of office training.

HOME ECONOMICS EDUCATION

A long-range curriculum development project has been initiated to provide additional leadership and assist in the coordination of curriculum work done by States. The ultimate goal of the project is to identify the basic topics in home economics for the secondary schools and set up guides for curriculum organization. Home economics supervisors, teachers, teacher educators, college subject-matter specialists, and representatives of national organizations met with the Office of Education staff to plan this project.

Staff members have participated also in curriculum work of organized college groups in order to relate the secondary school curriculum to teacher-education programs.

TRAINING AND RETRAINING

Automation and technological advances, changing economic considerations, and other factors have created unemployment for many individuals and in some cases have affected whole communities. The unemployment and concomitant manpower problems of workers whose skills become obsolete have attained national proportions, for they are often beyond the capacity of individual industries, local governments and school officials, or State governments to correct.

Only a few States had, prior to 1961, programs which could offer more than a token solution to the problem of providing training for unemployed and underemployed adults. Recognition of this situation led the Congress to provide training for these persons through passage of the Area Redevelopment Act in May 1961. The effectiveness and scope of the training provisions of this act were limited, however, to areas of chronic unemployment and also limited by financial considerations. The Manpower Development and Training Act of 1962 provides a broader program of training and authorizes comprehensive research and investigation into both current and future manpower requirements and resources.

Area Redevelopment Act

This act (Public Law 87-27) is designed to provide stimulus to the expansion of employment opportunities in areas of the United States designated by the Secretary of Commerce as redevelopment areas, i.e., areas suffering from substantial and persistent unemployment and underemployment.

Specifically, section 16 of the act provides for training and retraining of unemployed and underemployed persons who reside in redevelopment areas. Vocational training under the act is actually a joint venture in which the Department of Health, Education, and Welfare and the Department of Labor, working closely with State

and local officials, plan, organize, and finance training projects. The Office of Education is directly responsible for the administration of training funds, for providing adequate training facilities and services, and for assisting the States in conducting the training courses. Specialists in the Office assist the States and through them the local school districts in developing training proposals specially fitted to the training needs of individuals referred by the Department of Labor.

Since its passage, the Area Redevelopment Act has provided the means by which approximately 9,074 unemployed or underemployed persons have been trained for over 40 different types of occupations in 147 approved projects in 34 States and American Samoa.

Manpower Development and Training Act

Although no funds became available during fiscal 1962 for the administration of the Manpower Development and Training Act (Public Law 87-415), which was signed into law on March 15, 1962, many preparatory activities were undertaken by the Office of the Secretary, the Office of Education, and State boards for vocational education.

Programs in Higher Education

LAND-GRANT COLLEGES

Aid to land-grant colleges through the Division of Higher Education for the fiscal year 1962 amounted to \$10,744,000, of which \$7,140,000 was allocated to each State on a uniform quota. The remaining \$3,604,000 was paid to the States in variable amounts based on a proportionate population formula. These are funds supplementing the original land-grant endowments of 1862, the income from which totaled more than \$3.5 million in fiscal year 1962.

TEACHERS OF THE DEAF

On September 22, 1961, Public Law 87-276 was enacted to encourage and facilitate the training of a greater number of teachers of the deaf through grants-in-aid to approved institutions of higher education. By early 1962 the Advisory Committee on Training Teachers of the Deaf had been appointed and criteria and procedures established for the review, evaluation, and approval of applications for scholarships and training grants to colleges and universities. The institutions were notified in the spring so that students could begin their training in the fall of 1962.

Forty-three institutions of higher education were approved to provide this specialized training to 288 graduate and 159 undergraduate students. The scholarships include a cost-of-living stipend of \$2,000

for graduate students, \$1,600 for fourth-year undergraduate students, and tuition and fees paid by Federal grants to the institution. In addition, training grants were made available in varying amounts to the participating institutions, not only for strengthening existing programs but also for stimulating new ones. Scholarships awarded under this law are for a year of study.

National Defense Education Act

During the fiscal year 1962, the higher education programs under titles II, IV, V(B), and VI, of the National Defense Education Act (Public Law 85-864) continued at their maximum authorized levels.

Student Loans.—Since the inception of the student loan program in February 1959, about 350,000 students have received approximately \$225 million in National Defense Student Loans. In 1962, loan funds supported under title II at 1,452 colleges and universities provided assistance to 190,000 qualified graduate or undergraduate students. The loans, which averaged about \$470 each during this year, are long-term, carry a low rate of interest, and may be used to help defray the cost of tuition or books or to meet living expenses.

A recent survey of those who have obtained loans under this title showed that over 90 percent were enabled by their loans to start, or continue, their education on a full-time basis. Five out of seven of the borrowers were members of families with annual incomes of \$6,000 or less. More than 60 percent planned to teach. About one-fourth of the borrowers now repaying loans received under this program are currently teaching in elementary or secondary schools.

Funds available for title II loans during the 1961-62 academic year totaled \$99.2 million, from the following sources:

	<i>Million</i>
Appropriation	\$73.8
Contribution by institutions.....	8.2
Amount committed or obligated as of 6/30/61.....	14.2
Repayments by borrowers.....	3.0

From separate funds, allocations totaling \$955,772 were made during the year to 171 institutions in the United States for loans to approximately 1,200 Cuban refugee students.

Graduate Fellowships.—The aim of title IV is to increase the number of well-trained college and university teachers by providing graduate fellowships, by assisting institutions to expand and improve graduate-level programs, and by broadening the geographic distribution of facilities for education at the doctoral level. During 1962, 1,500 additional fellowships were awarded for study beginning in 1962-63, bringing the total number of active fellowships to 4,113 for the year, at a total cost of \$21,371,800. Funds under this program are

about equally divided between stipends and allowances for the fellows and grants to institutions to cover the costs of the program in which the fellows are enrolled.

During the 4 years ending June 30, 1962, the title IV program approved 849 new or expanded doctoral programs and awarded 5,500 fellowships, at a total cost of \$59,103,300, in the following fields: science and engineering (41 percent), humanities (25 percent), social science (26 percent), and education (8 percent).

Counseling and Guidance Institutes.—Title V(B) authorizes the operation of short-term and regular-session institutes by colleges and universities to improve the competencies of secondary school personnel engaged in counseling and guidance and of secondary school teachers preparing to become counselors. During the summer of 1962, 1,959 counselors and teachers preparing to be counselors attended 66 summer institutes, and 633 will have attended 21 regular-session institutes during the 1962-63 academic year, at a total cost of \$7,062,000. The Counseling and Guidance Institute Program continues to place increased emphasis on year-long training for regular enrollees and to arrange short-term, special-purpose institutes for those needing training in new techniques and for those who have not yet fully met the certification requirements. The cost of the program for the first 4 years was \$22,406,000.

Language Programs.—The Language Development Program (title VI) is designed to strengthen instruction in modern foreign languages at all levels of education through four allied operations: language institutes, language fellowships, language and area centers, and language research. A total of \$44,670,000 was appropriated for the first 4 years of the program's operation.

Language institutes are conducted by institutions of higher education, under contract with the Office, to provide advanced training for teachers and prospective teachers of modern foreign languages in elementary and secondary schools. The training emphasizes the use of new instructional methods and materials. During the summer of 1962, 4,368 teachers attended 80 summer institutes, and during the academic year 1962-63, 119 attended five regular-session language institutes. Some 490 teachers who had previously participated in an NDEA language institute in the United States attended second-level institutes held during summer 1962 in Puerto Rico, Germany, France, Russia, Mexico, Argentina, and Ecuador at a total cost of \$7,250,000.

Federal support of a total of 53 language and area centers amounted to \$2,080,000 in fiscal year 1962 funds. These centers are conducted, on a matching fund basis, by 33 institutions of higher education for the study of 52 "uncommon" languages and of the culture and economy of the areas in which the languages are spoken. In order to strengthen

President Kennedy's "Alliance for Progress," support in 1962 was extended to five new centers for Latin American studies.

Many modern foreign languages not commonly taught in the United States have been listed by the Commissioner of Education as needed by the Federal Government or by business, industry, or education. Graduate students of these languages are eligible to apply for fellowships under title VI. During the year, fellowships for the study of 55 of these "neglected" languages were awarded to 1,040 graduate students; 417 of the awards were extensions of existing fellowships.

A total of 190 fellowships were awarded in Spanish, Portuguese, and the Amerindian languages in support of the special emphasis on Latin-American studies. In April 1962, 34 postdoctoral fellowships were awarded for intensive study of Portuguese, Spanish, and Sub-Saharan African languages during the ensuing summer. The total cost of this program for fiscal year 1962 was nearly \$4 million.

Under the language research program, individuals and organizations working under contract with the Office develop specialized instructional materials (basic courses, grammars, readers, and dictionaries), primarily for the neglected languages, devise new methods of language instruction, and conduct surveys and investigations of language needs and resources. The various projects conducted under this program involve more than 100 modern foreign languages. During the year, 42 contracts involving 34 new projects were negotiated at a total cost of \$740,873. An additional \$1.25 million was obligated to continue 161 projects begun during preceding years.

Library Services

The factors affecting library development in the 1960's are increased demands resulting from population growth, enlarged school enrollments, stress on research and developmental activities by commerce, industry, and government in the face of rising costs of library materials, the shortage of trained librarians, and the emerging area of automated information storage and retrieval. The impact of the population explosion and its effect on libraries was surveyed in *The Future of Library Service, Demographic Aspects and Implications*, a staff-edited publication which appeared under the imprint of the University of Illinois.

The increasing cost of library materials was brought to the public's attention in an Office publication, *The Cost of Library Materials: Price Trends of Publications*, which indicated that, while between 1947-49 and 1961 the cost of the average book increased by 62 percent and the average periodical subscription by 55.5 percent, during the same period consumer prices rose by only 27.8 percent.

While there are now about 60,000 librarians serving in public school, college and university, and special libraries, it is estimated that there were about 7,000 openings in 1960-61. Since library schools graduated 2,370 students, they filled only about 1 out of every 3 vacancies, although the number of schools and the number of degrees have substantially increased during the last decade.

An advisory panel of the National Science Foundation and the President's Committee on Scientists and Engineers prepared a report on scientific, technical, and other highly trained manpower. Its recommendations crystallized into a special survey of a large sample of persons recorded in the 1960 census as college graduates, to determine the relationship between training and subsequent occupation and to provide information on demographic, economic, social, and professional characteristics. Several Government agencies, including the Office of Education, are supporting this "Post Censal Study of Professional and Technical Manpower," which includes public and school librarians.

The Office is engaged in the collection and dissemination of current data and trend analyses on library resources, services, personnel, and finances. In this connection the Office published *Statistics of Libraries: An Annotated Bibliography*. The dissemination of ongoing library science research throughout the country is carried on through the occasional publication, *Library Research in Progress*.

Public Libraries.—In the past year the Nation's public libraries have made a positive advance in the acquisition and use of resources and the provision of services. However, many libraries still have not attained the standards of minimum adequacy set forth by their national association. In 1961, according to State reports, 18 million persons did not have access to public library service, and 110 million had access only to limited service.

Of the 8,190 public library systems in the country, the 825 largest, serving population groups of over 35,000 (65 percent of the total population), were surveyed. During the year they added 10.5 million items to their holdings of 130.5 million volumes and circulated nearly 455 million volumes. Employing 35,500 staff members, one-third professionals, they reported operating expenditures in excess of \$194 million and capital outlay amounting to nearly \$35 million. However, these resources indicate the availability of only 1.17 volumes per capita. To provide minimum adequate service as defined by the American Library Association, 19 percent of these libraries would have to expand their collections, 22 percent would have to increase their staff, and 42 percent would require larger operating expenditures.

Rural Services.—The Library Services Act (Public Law 84-597), passed in 1956 and extended by Congress until 1966, authorizes an appropriation of \$7.5 million annually for grants to the States for

the extension of public library services to rural areas. This amount was appropriated by Congress for fiscal 1962. All of the States plus Guam, Puerto Rico, and the Virgin Islands are now participating under the Act.

Statistics compiled from 5-year summary reports submitted by the States clearly show the progress made under the Library Services Act. Thirty-six million rural people now have either new or improved public library services available to them, two million for the first time because of county and regional library development.

Highlighting the partnership aspect of the act is the fact that, in most cases, State and local governments are continuing their efforts to support good libraries. During the first 5-year period, State appropriations for the development of rural public library service increased 75 percent, local funds 60 percent. The 115 field consultants added under State plans have been a factor in making possible the progress described in the State reports.

The many positive achievements of the program should not overshadow the size of the job yet to be done. Preliminary data for 1961 indicate that more than 16 million rural residents had no access to local public library service, and that an additional 49 million rural people had only inadequate service. Moreover, because libraries in communities of over 10,000 population are ineligible for benefits under the Act, these communities have had little incentive to extend their library services. As a result, some States have undertaken less promising, but legally eligible, projects.

Stress continues to be placed on analysis of progress under the act with as much effort as possible being made to help each participating State develop the best possible plan of library development.

A progress report of the participating States and Territories for the first 5 years of the act was completed and will be published under title, *State Plans Under the Library Services Act: Supplement 3*.

School Libraries.—An important contribution of the Office to the development of school library service to education during 1962 was a 3-day conference, requested by the State school library supervisors to discuss such questions as how modern instructional programs and methods can be served best by the school library; what competencies school libraries and teachers need to administer and use the instructional materials center for the achievement of educational aims; what professional tools should be developed to give assistance in the selection and organization of all types of printed and audiovisual materials; and what changes in the preservice and inservice education of librarians and teachers are necessary to provide for the instructional materials concept.

State programs for the implementation of the 1960 standards for school libraries published by the American Library Association have

stimulated the formulation of new or revised regional and State school standards. The Office has undertaken a compilation, summary, and analysis of these standards for publication.

All data for the survey, *Statistics of Public School Libraries, 1960-61*, were collected and are in the process of tabulation and analysis. This survey, when completed, will update the 1953-54 comprehensive information on school libraries in the United States.

College and University Libraries.—Some libraries of institutions of higher education have collections that are among the most outstanding in the Nation. Almost 2,000 of these libraries now have a total of nearly 180 million volumes. They employ approximately 9,700 librarians and an equal number of subprofessional and clerical employees. Their total operating expenditures reach \$159 million. While 9 of the largest institutions have collections of almost 30 million and a staff of over 1,000 librarians, over half of all academic libraries in 1959-60 did not measure up to the minimum staff requirements set by ALA and 1,200 libraries failed to meet the minimum requirements for adequate collections. While noticeable improvements were made over the previous year, the ever-growing enrollments and increasing cost of library materials prevent many of these libraries from providing the services considered to be essential as supplements to modern teaching methods. An analysis of management and salary data was completed which should prove of value to academic administrators and librarians.

Special Libraries.—For the first time the Office embarked on a new program to provide information, conduct surveys, and render consultant service to special libraries, which contribute substantially to the Nation's research efforts. It is estimated that there are approximately 10,000 of these libraries and information centers which employ as many as 8,000 librarians serving Federal, State, and local government agencies, commercial and industrial organizations, and private organizations and associations. Their total annual expenditures are almost \$60 million. These libraries, which have unique collections in specialized areas of many fields of knowledge, make their resources available on request to other libraries and to the research community. The statistical coverage of this group of libraries will make it possible to report in the future on the Nation's total effort in librarianship.

International Education

Education today has become the third arm of international relations. The traditional first arm has been diplomacy backed up by force. After World War II, when it became obvious that the use

of force to achieve international objectives might destroy mankind, there was a search for peaceful means for the achievement of international goals, thus economics became the second arm of international relations, and large sums were invested in commercial enterprises.

Recently, economists such as Schultz and Harbison in the United States and Vaizey in England have said that the development of human resources is the foundation of economic development. This doctrine has long been fundamental to the Communist theory of economic, political, and social development and was borrowed by them from Jefferson and other 18th century intellectual leaders. One result of the fact that the Communist world has long understood the connection between human and economic development is that they have planned ahead, and their education mechanism has produced exportable surpluses of experts in many fields, including public health and the teaching of English, in which the United States has a deficit of personnel.

The development of education as the third arm has had many effects on education in America. The Bureau of International Education is deeply involved in some of these matters.

First, the nature and goals of comparative education as a discipline are changing from "photographic" studies of education as it exists in other countries, to analytic and truly comparative studies required for effective cooperation in educational development between the United States, the United Nations, and the emerging new nations.

American education is Western European in origin, and concentrates on North America and Western Europe. But political power is shifting toward four other major cultural groupings: the Slavic, Far Eastern, Indian, and Arabic worlds. There are other important ethnic and political areas, such as Latin America, about which most Americans are not sufficiently informed. The Office of Education is increasingly involved in helping American States and local communities develop a broader, more realistic educational introduction to the modern world.

Many public and private agencies are active in international education. The Office has helped to develop an effective working partnership with other Federal agencies, thus reducing duplication of effort and increasing the effectiveness of existing programs.

Since World War II, 45 nations have become independent and are seeking to attain almost immediately through education those standards of living which other nations required decades or centuries to achieve. In these countries, illiteracy rates range from 25 to 95 percent. Where education has been available to a privileged few, it is now demanded as the right of all. Thousands of teachers must be trained and thousands of classrooms must be built. New curriculums

and textbooks must be developed which contribute directly to economic, social, and political growth. Existing universities and related institutions must be strengthened and new ones established.

During 1961-62, over 72,000 foreign students and others seeking further training and practical experience came to the United States. Foreign faculty members and research scholars at our universities numbered 5,530, and 8,497 doctors of medicine served as interns and resident physicians in our hospitals.

The Agency for International Development brought approximately 6,500 participants to the United States for training in many fields and arranged for another 2,000 to be trained in other than their own countries. Under the Fulbright-Hays Act, the Department of State's Bureau of Educational and Cultural Affairs brought 4,800 foreign students, teachers, professors, research scholars, leaders, and specialists in different fields to the United States.

Educational Exchange and Technical Services

The Office of Education in 1962 continued to work cooperatively with the Department of State's Bureau of Educational and Cultural Affairs, in administering the Teacher Exchange and the International Teacher Development Programs, and with its Agency for International Development, in arranging for the orientation and placement of participants under the Technical Assistance Training Program. The Office has worked with many public and private agencies, participating in conferences of numerous organizations and advising on the problems and status of the various international educational programs. It worked with the Chief State School Officers and the Conference of Governors to remove obstacles to teacher exchange and to provide a wider participation in these projects. Further, it assisted a growing number of educators from other lands who did not hold grants under any program administered by the Office by providing program planning services, counsel, and publications about various phases of American education.

TEACHER EXCHANGE PROGRAM

The Teacher Exchange Program showed an increase from 624 in 1961 to 718 exchanges in 1962, as follows: teacher interchanges by which two teachers exchange positions, 152 pairs (304 teachers); U.S. teachers assigned abroad on a one-way basis, 167; foreign teachers placed in the United States on a one-way assignment, 54; summer seminars overseas for United States teachers, 173. A seminar was held in Italy and the Netherlands for 20 American school administrators in which the respective systems of education were compared at all levels. Eight summer seminars were conducted for groups of

Spanish teachers in Spain and Colombia; teachers of French in France; teachers of German in Germany; teachers of the classics in Italy; teachers of history in appropriate fields in Brazil, France, and India.

Teacher interchanges in many different subject fields at the elementary and secondary levels continued with Great Britain, Canada, Australia, and New Zealand. Foreign language exchanges predominated with other European and Latin American countries and gave impetus to the movement for an earlier beginning of foreign language study. The majority of U.S. teachers abroad on a one-way basis taught English as a foreign language, although many in Africa and the British West Indies were teaching in other fields. The interchange of teachers with the United Kingdom remained the largest single project in 1962.

TEACHER DEVELOPMENT PROGRAM

The International Teacher Development Program brought 516 teachers and school administrators to the United States for training and for visits to schools in 1961-62. Representatives from 65 countries and dependencies took part in the program, and 16 colleges and universities cooperated with the Office of Education in arranging special seminars. Seventeen groups of teachers, teacher trainers, and school administrators were interested in the following fields: four groups in the teaching of English as a second language; three groups in American civilization; two groups each in elementary education, secondary education, and administration and supervision; one group in science education; one group in history teaching.

Two workshops in elementary, secondary, and vocational education were held at the University of Puerto Rico for 108 educators from South and Central America.

TECHNICAL ASSISTANCE TRAINING PROGRAM

The Office of Education supervised programs for 796 participants from 53 countries during 1961-62, including participants from ministries of education or similar offices who came on short, itinerary-type programs. There were also many long-term academic placements, and degrees were awarded to 155 participants, of whom 96 came from the Near East-African Area, 43 from the Far East, 15 from Latin America, and one from Europe. Countries with the largest number of representatives were Vietnam (82), Turkey (69), the Congo (64), Sudan (48), Ethiopia (41), Iraq (35), Philippines (32), Tunisia (28), Somalia (24), and Thailand (23). Training was arranged for educators in approximately 60 different fields of education, involving approximately 150 training centers located in almost every State, the District of Columbia, and Puerto Rico. It is estimated that 950

educators will have programs arranged by the Office in 1962-63. The greatest increase in number of participants is expected from Africa.

NONGRANT VISITOR PROGRAMS

The number of nongrant visitors continued to increase in 1962, reaching a total of 909 compared to 618 in 1961 and 254 five years ago. Several factors contribute to this steady growth: increased expenditures by foreign governments and institutions for educational missions to the United States; increased travel with personal funds; and an increase in group travel (for example, a group of 150 German teachers, another group of 40 Swiss teachers). Another factor is the growing awareness abroad of the services provided by the Office of Education. Numerous visitors to the Office in 1962 were referred by friends who had received program assistance from the Office. To meet the increasing requirements of the nongrant visitor program a Facilitative Services Unit was established within the Bureau of International Education.

INTERNATIONAL ASSIGNMENTS FOR SPECIALISTS

The improvement of national programs of education is a major objective in programs of technical assistance to countries in the underdeveloped areas of the world. Programs of this nature conducted by AID (the Agency for International Development of the State Department) and by UNESCO (United Nations Educational, Scientific, and Cultural Organization) require a continuing overseas staff of approximately 900 education advisors. The Office of Education assists in recruiting education specialists for both programs.

The Office also provides professional backstopping services to education advisors abroad and periodically forwards to the various AID missions overseas packets of education materials.

CLEARINGHOUSE ON EDUCATIONAL EXCHANGE

The Office provided for the Department of State 118 statistical tabulations on Government-sponsored grantees entering and leaving this country during the year, a service it has given annually since 1952. The statistical studies include such information on grantees as country or State of origin and of destination, fields of specialization, age groupings, and veterans' status. These studies show that 4,800 foreign nationals from some 86 countries associated with Americans in all 50 States and territories. They had an opportunity to understand America as it really is, while engaged in study, teaching, research, and other projects in over 180 specialized fields of study. The fields attracting the highest numbers of individuals were: Medicine, American civilization and literature, economics, law, secondary education, teaching of English as a second language, business administration, mathematics, youth activities and organization, and physics.

Over 1,500 of these grantees attended some 400 different institutions of higher learning. The universities in which most grantees were placed: California, Columbia, Cornell, Harvard, Illinois, Kansas, Michigan, Pennsylvania, Wisconsin, and Yale.

The 2,000 Americans who went abroad during the year also had an opportunity to gain a deeper understanding of the problems, needs, and hopes of other peoples. They came from the 50 States and Territories and went to more than 60 countries to study, lecture, or conduct research in some 150 specialized fields, chiefly the following: Romance languages and literature, music, teaching English as a second language, Germanic languages and literature, English language and literature, elementary education, art, political science and international relations, secondary education, and American literature.

In addition to providing the above types of statistical information, the Office prepared records giving the name, address, category, specialty, occupation, and institution of placement of every foreign grantee entering this country under the international educational exchange programs.

CREDENTIAL EVALUATION

University admissions offices, boards of certification and licensure, State departments of education, and other agencies and institutions called upon the Office to interpret over 6,000 individual cases of foreign academic credentials, an increase of approximately 13 percent over the previous year. Office specialists participated in national meetings of the American Association of Collegiate Registrars and Admissions Officers and the National Association of Foreign Student Advisers. The Office maintained and strengthened its close association with the work of the Council on Evaluation of Foreign Student Credentials in promoting studies of foreign education and in developing placement recommendations for persons educated in other countries.

International Studies

Comparative education studies completed or underway in fiscal 1962 were designed to contribute to a better knowledge and understanding of foreign educational systems and developments. There have been increasing demands from educational institutions, Government agencies, and other organizations and individuals for this kind of information, as their educational programs and interests in other countries expand, and as growing numbers of persons with foreign educational preparation seek admission to institutions or professional employment and licensing in the United States.

Major studies published in the fiscal year 1962 included *Higher Education in the Philippines*, *School Reform in Sweden*, *Education*

and the Development of Human Technology, and *The Peoples Friendship University in the U.S.S.R.* Others issued during the year were concerned with certain aspects of education in Argentina, Bolivia, Morocco, India, Yugoslavia, the Caribbean area, Western Hemisphere countries, and with educational grants overseas by American foundations. Other studies underway and at various stages of completion in fiscal year 1962 dealt with ministries of education around the world (issued in August 1962) and with education in the following countries or regions: Argentina, Ceylon, Colombia, Communist China, Cuba, Czechoslovakia, Ecuador, France, Hungary, Indonesia, Iran, Ireland, Latin America, New Zealand, Peru, Poland, Rumania, Scotland, Southeast Asia, Uganda, Uruguay, USSR, Yugoslavia.

Under contracts negotiated pursuant to Public Law 480 (the Agricultural Trade Development and Assistance Act of 1954), the first reports on the scanning, translation, and annotating of foreign materials were received from Burma, Colombia, and Poland.

In May 1962, the Office of Education and the Comparative Education Society jointly sponsored the annual Eastern Regional Conference of the Society at the Office. The program dealt with the general theme "Education and National Development." Areas covered were Africa, Latin America, and Communist China. The use of films in teaching comparative education, as exemplified by a film on Yugoslav education, was also a program topic.

During the year, comparative education specialists served as educational advisers on official trips, one going to Africa and another accompanying a congressional delegation to the Soviet Union.

EDUCATIONAL MATERIALS LABORATORY

The Educational Materials Laboratory is maintained to display books and materials available for school programs in the United States, and foreign textbooks and other educational material. Represented among its 12,000 items are books, periodicals, charts, films, filmstrips, tapes, and discs. Emphasis is given to the collection of textbooks used by elementary and secondary pupils in the United States, supplementary reading books, and publications related to teacher education. Teachers and librarians accounted for 3,900 visits to the Laboratory last year, more than doubling the figure for the previous year. As the number of visitors has increased, the proportion of U.S. educators has grown from approximately one-third to one-half the total.

Interpretative services in connection with these materials was provided to foreign educators studying in this country, to U.S. technicians serving in education missions abroad, to teachers in American schools overseas, to Office of Education specialists, to educators in

U.S. schools, and to both American and foreign research workers. The Laboratory received an increased number of requests for advice on the organization and maintenance of materials centers in the United States.

The *Educational Materials Laboratory Report* provides information on the nature and availability of publications held in the Laboratory.

Food and Drug Administration

Introduction

A LISTING of some of the year's accomplishments, regulatory problems, and issues up for decision demonstrated that consumer protection was dynamically on the move in 1962:

- AMA-FDA Congress on Medical Quackery Held
- First Seizures of Unlabeled Hazardous Household Substances Made
- Campaign on Packaging Violations Intensified
- Drug Counterfeiting Ring Ended
- Bootleggers of Dangerous Drugs Jailed
- Incubator Reject Egg Handlers Sentenced
- Physicians' Samples Abuses Curbed
- Scheduled Hearings for Whole Fish Flour Standards Postponed
- President Sends Message to Congress on Consumer Protection
- Overhaul of Special Dietary Regulations Proposed
- False Promotions via Books, "Doorbell Doctors," Radio Spielers Attacked
- Fake Medical Devices Seized—Others Destroyed by Owners
- FDA Doctor Prevents Sale of Baby-Deforming Drug
- Controls on Investigational Drugs to be Tightened
- FDA Scientists Explore New Fields of Consumer Protection
- Kefauver-Harris Drug Amendments Enacted

From this sample of headlines similar to those that have been appearing in the daily press throughout the year, it is evident that 1962 was a banner year for consumers through major enforcement accomplishments. However, it is also apparent that consumer protection is still inadequate and almost unbelievably complex in its ramifications.

Consumers may take a considerable measure of encouragement from the accelerated pace at which both the executive and legislative branches of the Government were moving to strengthen consumer protection during 1962. Of special interest in this connection was President Kennedy's message to Congress on consumer protection delivered on March 15, 1962—the first such message ever devoted exclusively to consumer problems.

The President's message cited four basic consumer rights:

1. The right to safety
2. The right to be informed
3. The right to choose
4. The right to be heard

The Federal Food, Drug, and Cosmetic Act and the Federal Hazardous Substances Labeling Act are founded on these basic rights. The consumer is a principal beneficiary of these laws. This report is an account of the stewardship entrusted to the Food and Drug Administration to protect consumers through enforcing these laws.

1. *The right to safety.*—The benefits to consumers from miraculous new drugs and chemical aids to food production and processing are now largely taken for granted. But any tendency to take for granted that these products are without potential danger was brought to a nerve-jangling halt in the early summer of 1962. Complacency vanished like mist before the breeze as the story unfolded of the narrow escape by American families from the tragedy of grotesque deformities in babies caused in European countries by a sleeping pill containing the drug thalidomide. During the late winter and spring it had become increasingly certain that thalidomide was responsible for thousands of such deformities in countries around the world where it had been marketed for several years.

This drug did not reach the market in this country because of the safety clearance requirements in the Federal Food, Drug, and Cosmetic Act, and because of the stern refusal of an FDA medical officer to clear the drug on what she believed to be inadequate safety evidence provided by the manufacturer. The President conferred a Distinguished Federal Civilian Service Award on the medical officer, Dr. Frances Kelsey, with the following citation:

Her exceptional judgment in evaluating a new drug for safety for human use has prevented a major tragedy of birth deformities in the United States.

Through high ability and steadfast confidence in her professional decision she has made an outstanding contribution to the protection of the health of the American people.

Thalidomide had been widely distributed to doctors in the United States under provisions in the law allowing distribution for investi-

gational use to determine safety and usefulness of new drugs. As the extent of the investigational distribution was learned, it became apparent that tightening of controls over such distribution of uncleared drugs was necessary. Proposed new regulations were issued. Congress quickened its pace on drug legislation before it, as statutory gaps in consumer protection came to be interpreted by the public in terms such as the possibility of deformed babies, and public clamor arose for strengthening the law in every respect necessary to close these gaps. Newspapers day after day headlined developments in the thalidomide episode and reported legislative progress toward strengthened drug provisions in the law.

The importance of premarketing safety clearance of new drugs had been indelibly stamped on the minds of American consumers.

Despite safety clearance requirements, large-scale use of a drug after release sometimes results in discovery of side effects not observed during the premarketing investigations. And a breakdown in factory control procedures may result in the marketing of off-strength, contaminated, or mislabeled drugs.

Altogether 67 defective or mislabeled drugs had to be recalled from the market during the year, some of them after injuries occurred. Until passage of the Drug Amendments of 1962, FDA had no authority to require manufacturers to report such injuries, nor could FDA inspectors require manufacturers to permit a check of complaint files. Previous approval of new drugs could be revoked only when there was new evidence on which to establish that the drug was unsafe.

It is self-evident that the safety rules for pesticides, food additives, and color additives are just as important as those for new drugs. Agricultural chemicals have revolutionized the farmer's production methods in horticulture and animal husbandry. Technological advances in food processing, packaging, and distribution have brought a tremendous and ever-increasing variety and volume of convenience foods whose main or entire preparation is on the factory processing line instead of in the home kitchen.

Over 45,000 chemical formulations are available to the operators of 3.8 million farms today for more effective production of crops. There are an estimated 2,200 chemicals used in foods and food packaging, produced by approximately 6,500 manufacturers. In turn, these chemicals are used by 73,000 manufacturers, processors, and packers of food. Approximately 15,000 establishments manufacture and distribute drugs.

The necessary checking on how new products are controlled after they get into commercial production has multiplied the workload of FDA's inspectional and analytical staffs, and has posed many research problems.

Chart 1.—RETAIL SALES OF FOOD IN THE UNITED STATES, CALENDAR YEARS 1952-61

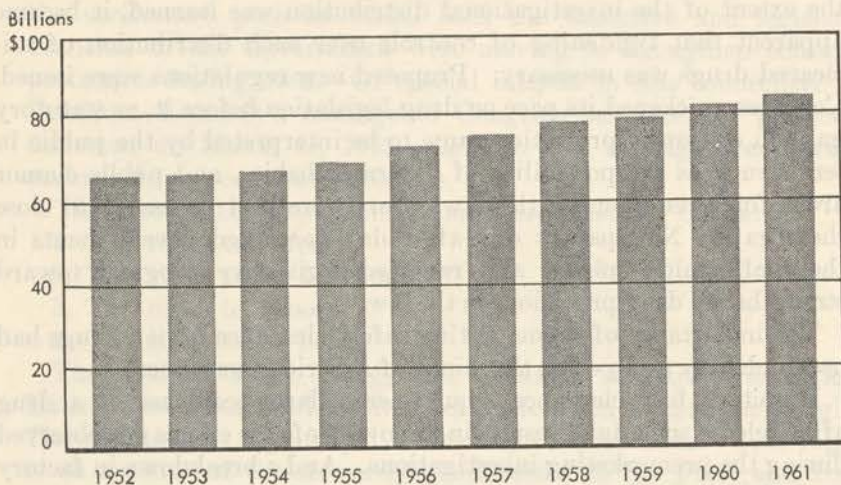
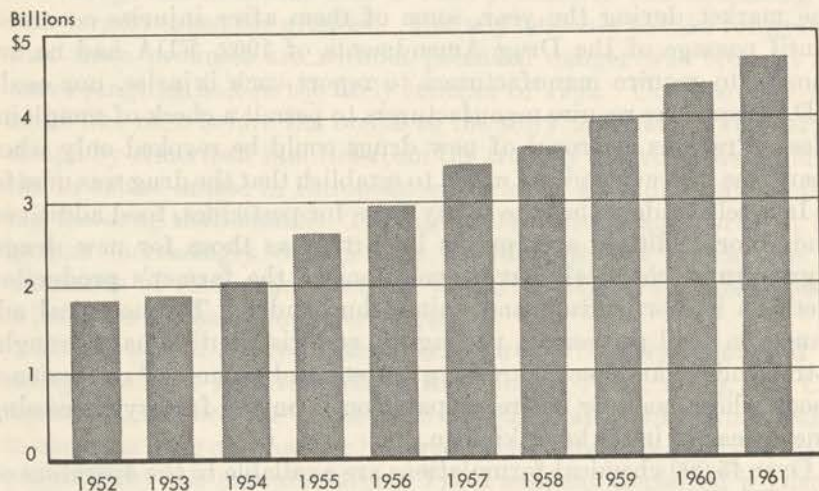


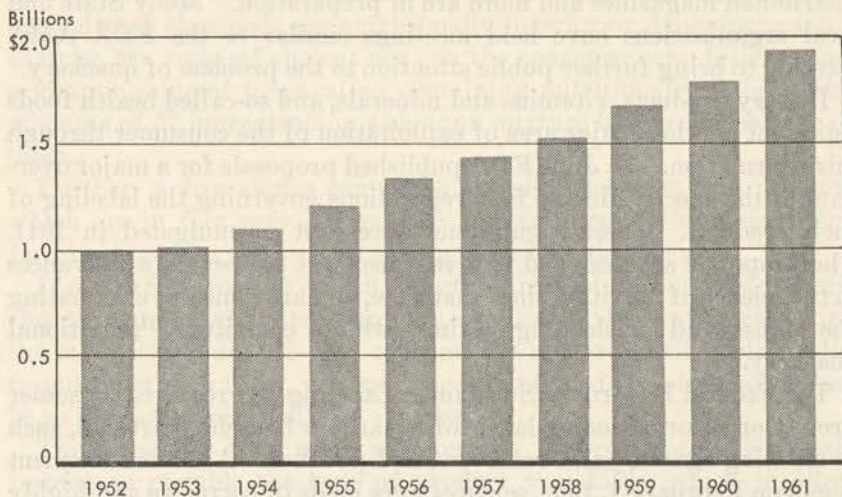
Chart 2.—RETAIL SALES OF DRUGS IN THE UNITED STATES, CALENDAR YEARS 1952-61



2. *The right to be informed.*—Major laws enforced by FDA seek to secure this right by affirmatively requiring that information needed by consumers for intelligent purchase and use be prominently and truthfully stated on product labeling. False and misleading labeling is specifically prohibited. Enforcement of these requirements has received increasing emphasis as FDA resources have grown, and reached an all-time high in 1962.

However, enforcement efforts to bring about honest and informative product labels are insufficient of themselves. Equally or perhaps

Chart 3.—RETAIL SALES OF COSMETICS IN THE UNITED STATES, CALENDAR YEARS 1952-61



more important is the combatting of misinformation. Prospective consumers of foods, drugs, and cosmetics are constantly barraged with misinformation through channels often deliberately calculated to be outside the reach of the law and within the constitutional protection accorded to freedom of speech and press. Such misinformation is peddled in books, magazines, newspapers, radio-TV and live lectures by self-styled experts, and by door-to-door salesmen operating within the sanctity of the home. Such misinformation may be presented in the guise of health suggestions, medical advice, nutrition advice, weight reducing tips, advice to the elderly, and so on.

There is no field in which misinformation is more vicious or more dangerous than that of medical quackery.

Quackery is big business. Its cost to the Nation in lives, injuries, and money are not precisely known, but it is reliably estimated that consumers spend needlessly more than a billion dollars a year on falsely represented drugs, foods, and cosmetics.

The first National Congress on Medical and Nutritional Quackery, sponsored by the American Medical Association and the Food and Drug Administration, was held in Washington in October 1961. It gave 650 representatives of more than 200 organizations an opportunity to take an overall look at the growing problem of quackery.

A follow-up meeting was held in Chicago in March 1962 to appraise the results of the Congress. It was agreed that the Congress had accomplished its main objectives. These were to strengthen existing liaison among various Government enforcement agencies and public service groups, and to stimulate widespread public awareness of the threat posed by the rackets in quackery.

Many articles on the quackery problem have appeared in nationally distributed magazines and more are in preparation. Many State and local organizations have held meetings similar to the FDA-AMA meeting to bring further public attention to the problem of quackery.

Dietary products, vitamins and minerals, and so-called health foods represent another major area of exploitation of the consumer through misinformation. In June FDA published proposals for a major overhaul of the special dietary food regulations governing the labeling of such products. These regulations were first promulgated in 1941. The proposals are designed to give consumers the benefit of advances in the science of nutrition since that time, and are aimed at eliminating the false and misleading claims which constitute "nutritional quackery."

The Federal Hazardous Substances Labeling Act requires consumer protection information on labels of hazardous household articles, such as cleaning agents, paint removers, and polishes. After enforcement began on February 1, 1962, seizures were made of corrosive and highly toxic products which did not contain the warning information required by law. As the labels of hazardous substances are brought into compliance with the new law and its regulations, accidental injuries, especially to children, should be materially reduced. If the law is to accomplish its purpose, however, consumers must be educated to read and heed the label cautions and directions.

FDA participation in the first observance of National Poison Prevention Week focused public attention on the consumer protection objectives of this new law.

To carry out the consumer education responsibilities of the Department in line with the President's message, the Secretary has designated a Special Assistant to the Secretary for Consumer Protection, and announced the formation of a Departmental Committee for Consumer Protection. The Special Assistant was selected from the FDA staff.

Within FDA, a Consumer Education Branch was established in the Division of Public Information, to develop further FDA's consumer education programs for adults and students, and to respond to consumer inquiries. A new "Consumer Memo" series was initiated as a medium for explaining matters of special interest, such as pesticides, food additives, food standards, and labeling.

3. *The right to choose.*—This is inseparably bound to the right to be informed. To exercise a truly free choice, the consumer must have accurate information about the product to be selected. In the supermarket she is frequently seriously confused in her choice when she is confronted with exaggerated claims for competing products.

But the consumer also must be free of false notions about other similar products available. The consumer who believes that crops

raised with the aid of chemical fertilizers and other properly used agricultural chemicals are nutritionally inferior or dangerous cannot exercise her right of choice; nor can the consumer who believes that a vitamin-mineral preparation containing nutritionally insignificant amounts of 57 ingredients in a shotgun mixture is superior because of them.

Further, a free choice cannot be exercised between two products which are in fact very different in acceptability if the determining factors cannot be detected or measured by the consumer.

If one drug is up to strength, the other inferior; if one food is clean, the other produced under insanitary conditions; if one product is pure, the other contaminated—the consumer is not ordinarily able to distinguish between them, yet one is acceptable and the other would not be so if a free choice could be exercised.

The consumer thus must rely on law enforcement to eliminate insofar as possible the type of product variability which in effect deprives one of the freedom of choice. Programs to assure cleanliness and wholesomeness of foods and safety and integrity of composition of all regulated products serve this consumer interest.

But there are other areas in which the exercise of the right to choose depends upon the presence of certain information on the product label. This is more fully discussed under item 2 above. In 1962, 85 seizures were made of products so labeled that important consumer information was hard to find, hard to read, or partly or entirely absent.

4. *The right to be heard.*—FDA encourages consumer participation in the administrative process to the fullest extent possible, just as similar participation by industry, scientific groups, and other interested parties is encouraged. Consumer participation is especially invited in the setting of food standards, for example, and in the formulation of labeling regulations as in the case of special dietary foods.

The Consumer Memo series mentioned earlier will carry information about food standards to enable consumers better to understand controversial issues and to provide authoritative and meaningful comment. Consumer correspondence also provides a pulse by which to observe opinion on matters of current interest.

FDA's Consumer Consultant Program, with consultants in each of its 18 Districts, serves as a channel through which consumers can express their views about additional areas of protection they need, or about FDA programs and policies. Numerous consumer conferences were held throughout the country during the year for forum discussions directly with consumers. As stated in the President's message, this program will be expanded. A Public Service Advisory Committee of consumer leaders has been established to serve as a source of consumer opinion on important matters.

Administrative Progress

The enforcement appropriation for fiscal year 1963 is \$28,280,000. This compares with \$23 million for fiscal year 1962, representing a net increase of \$5,280,000. This provides for an increase of 542 positions, bringing the authorized enforcement staff to 3,012. This does not include employees assigned to certification services and pesticide petitions, which are financed on a self-supporting fee basis.

Of the increases in personnel, 342 will be assigned to the field to bring the field staff to 1,860. The field increases of 1962 and 1963 should permit inspections of the regulated firms at an average of about once in every 4 years. The goal is to inspect most establishments at least once a year.

Of the 647 man-years for inspectional work in the fiscal year 1963, 431 (or 67 percent) will be assigned inspections involving health, 165 (or 25 percent) to sanitation inspections, and 51 (or 8 percent) to work involving economic cheats, largely misbranded and substandard foods.

The 1963 budget provides manpower for FDA to undertake an inventory of these establishments, using a new integrated automatic data processing system for headquarters and field use. This system is designed to supply information for use in appraising FDA's work obligation and regulatory accomplishment, and for planning immediate and long-range needs and activities. In 1962 all establishment inspection data were prepared for computer input and processing.

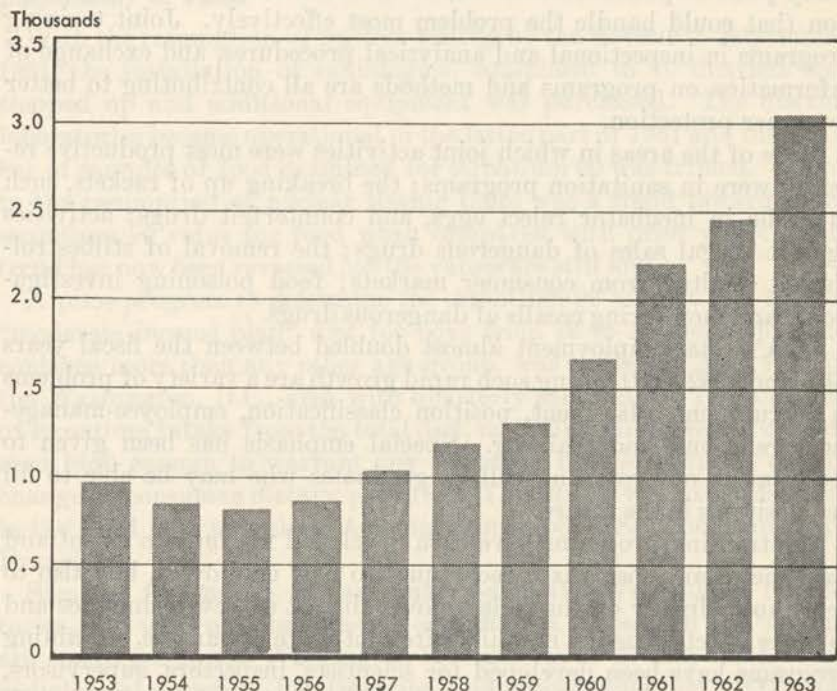
Under the increased appropriations several other important programs will receive substantial increases in both manpower and equipment. The program to protect consumers of fresh fruits and vegetables against harmful residues of agricultural poisons will be strengthened by 190 new positions to permit the sampling and examination of a higher percentage of shipments for residues. Other food programs will be accelerated by 96 new personnel for food research, food additives, and food standards work.

Drug protection will be stepped up by the addition of 126 positions. These new employees will be assigned to new drugs and efforts to combat the illegal sale of prescription drugs and traffic in counterfeit drugs.

Twenty new positions have been assigned to the coverage of imports offered for entry. The total retail value of these imports is approximately \$6 billion dollars a year. The relatively small percentage of coverage has been inadequate to assure that foods, drugs, and cosmetics produced under the regulations of other countries meet the requirements set for domestically produced goods.

All other staff increases will be used to improve FDA's Washington and field management functions, its information services, coopera-

Chart 4.—BUDGETED POSITIONS FOR FOOD AND DRUG ADMINISTRATION ENFORCEMENT OPERATIONS (EXCLUDING FEE-SUPPORTED CERTIFICATION SERVICES), FISCAL YEARS 1953-63



tion with State and local agencies, scientific research on cosmetics and animal feeds, processing of regulatory actions, and the staffing of a new pharmacological animal laboratory building.

In nonstaff areas, the 1963 budget will permit FDA to start renovating the four remaining district offices and laboratory facilities yet to be expanded and modernized under the program begun several years ago. It will also permit substantial steps to be taken in the program of replacing and modernizing scientific equipment.

A study of State and local food and drug programs will be made with \$300,000 of the appropriation. This will be undertaken by a private research group under contract. The main objective of this study, in which State and local governments will cooperate, is to find out where coordination of Federal and State and local activities can be expanded and improved.

FDA has had an organizational unit devoted to cooperation in Federal, State, and local food and drug enforcement programs since 1914. More than half the States have food, drug, and cosmetic laws paralleling the Federal law before enactment of the Drug Amendments of 1962, and most of the others have similar laws in one or two of these areas but not in all.

Additional FDA personnel have been added to provide closer coordination of Federal-State activities in each of the past several years. Many joint inspections are made, with actions taken by the organization that could handle the problem most effectively. Joint training programs in inspectional and analytical procedures, and exchange of information on programs and methods are all contributing to better consumer protection.

Some of the areas in which joint activities were most productive recently were in sanitation programs; the breaking up of rackets, such as traffic in incubator reject eggs, and counterfeit drugs; activities against illegal sales of dangerous drugs; the removal of stilbestrol-treated poultry from consumer markets; food poisoning investigations; and monitoring recalls of dangerous drugs.

FDA's total employment almost doubled between the fiscal years 1958 and 1962. Attending such rapid growth are a variety of problems in recruitment, placement, position classification, employee-management relations, and training. Special emphasis has been given to recruitment of promising college graduates who may be able to fill key positions in the future.

The training programs have been developed not only to orient and teach necessary specialized techniques to new employees, but also to help those already on the rolls to keep abreast of new techniques and to make effective use of new and often intricate apparatus. Training programs have been developed for scientists, inspectors, supervisors, administrators, and clerical employees. Some of these programs were extended to State employees with similar new responsibilities requiring specialized training. These training classes were attended by 3,000 personnel.

Organizational changes were put into effect in 1962 to facilitate operations in enforcement, administrative management, and consumer and industry education functions.

The handicap of operating the headquarters staff in five scattered permanent and temporary buildings in Washington will be alleviated when the new FDA building is ready for occupancy. Actual construction began in January 1961 and is expected to be completed in March 1963, followed by installation of equipment. The building may be occupied in the late fall of 1963.

A contract has been awarded for the construction of a new animal laboratory building at Beltsville, Md. This facility will permit FDA to make basic tests under optimum conditions to determine the toxicity of food and color additives and other substances in foods, drugs, and cosmetics. This fundamental work is now being conducted in crowded and antiquated facilities in Washington.

Food, Drug, and Cosmetic Act

ON THE FOOD FRONT

Radioactivity in Foods

With the resumption of nuclear testing by the Soviets in September 1961, the installation of radiological equipment in 10 districts was stepped up and additional equipment was purchased. The district laboratories became operational in the latter part of 1961 and the number of samples of food examined for strontium 90 was tripled. Prior to the resumption of nuclear testing there was a trend toward lower strontium 90 value for food when compared with prior years. This trend has now been reversed but the values are still low.

A pilot program to determine the strontium 90 content in a typical "moderate income plan" diet for boys from 16 to 19 years old, who consume more than any other age group, was started in May 1961 in the Washington, D.C., area with quarterly samplings. The amounts of strontium intake from the total diet, including milk, are not considered high enough to warrant any action by the Government or any change in consumer dietary patterns. This study was expanded late in the fiscal year to include Atlanta, Minneapolis, St. Louis, and San Francisco.

Samples for cesium 137 are analyzed in the Washington laboratories, also with no unsafe levels encountered. Research and studies are conducted in the Washington laboratories to develop methods of radiological detection, identification, and decontamination. FDA has a total of 116 positions for radioactivity work in Washington and the 18 field districts.

Chemicals in Foods

Food Additives.—Surveillance of food additives used in food processing is one of the essential elements of food establishment inspections. Attention is given not only to whether additives being used are permissible but also whether they are being used at safe levels. Laboratory analyses of some foods are conducted to check these levels. Inspections are also made at plants manufacturing regulated additives for assurance that the additives used by food processors meet labeled specifications.

The first seizure of a food containing mineral oil under the Food Additives Amendment involved a consignment of biscuits containing up to 6,700 parts per million. Inspection of the manufacturer showed the biscuits were being brushed with a mixture of mineral and soybean oil to prevent them from sticking together in the package. A consignment of the biscuits was seized at the warehouse of a market chain.

Later, 140 gallons of extra heavy mineral oil labeled for both food

and drug use were seized under the Food Additives Amendment. The label of the product stated: "excellent for use as a nonfattening oil in salads" but nutritionists have found that mineral oil inhibits the absorption of fat-soluble vitamins, particularly A and D. For this reason it should not be consumed at mealtime.

Most of the manufacturers of stilbestrol pellets for artificial caponization of chickens voluntarily discontinued their production late in 1959, after tests by improved methods had shown residues in the liver, skin, and kidneys of treated birds. Since this compound had been found to induce cancer in test animals under certain conditions, any use of it which results in a residue in any human food product is illegal under the Food Additives Amendment. In December 1961 the New Drug Applications of the firms which refused to discontinue voluntarily the manufacture of the pellets were revoked. Two firms are contesting FDA's authority to revoke the previous safety clearance of the drug for this purpose.

As a result of Federal, State, and local surveillance, more than 25,000 pounds of stilbestrol-treated dressed poultry and 3,000 live chickens were destroyed by New York City officials. Philadelphia health officials condemned and destroyed poultry containing stilbestrol at 15 locations in their city. Federal seizure was made of 6,880 pounds of frozen chickens and chicken livers and necks.

A meat seasoning containing niacin and polyvinylpyrrolidone, a stabilizer, was seized because these additives had not been cleared as safe for use in such a product. The amount of niacin in the product was far greater than would be used in a food supplement; when too much is consumed, severe flushing of the face may result. Although labeled as a seasoning, the product would act as a preservative and color fixative thus preventing the detection of aging or spoiling ground meat. Several other chemicals used in the product were undeclared preservatives.

Among the other foods seized for nonpermitted or above-the-limit additives were imitation vanilla containing coumarin, flour and nonfat dry milk containing inorganic bromide residue from fumigants used, and vitamin preparations and goat milk with excessive folic acid. Pesticides were found in three seized processed products—wheat bran, butter, and fish oil (see Pesticides in this section). It is believed that the three chlorinated hydrocarbons found in the fish oil were derived from contaminated sea water.

Faulty processing equipment and careless handling resulted in a number of seizures of chemically contaminated foods. A chemical flavor in canned fruit cocktail was traced to kerosene reaching the air jets of the filling machines as the result of pressure drops in a high pressure tank one night during recurring power failures. The manu-

facturer recalled outstanding stocks in possession of a food chain. Lead contamination of puffed cereals resulted from continuing use of worn lead gaskets in the "popping guns." More than \$8,000 worth of contaminated feed had to be destroyed because a truck normally used to haul fuel oil was used to haul molasses for the feed without being cleaned before such use. The accidental substitution of a poisonous chemical for a safe one in a dip for peeled potatoes is discussed under Food Poisoning.

Pesticides.—There is increased public awareness of the potential danger that produce in the market place may bear toxic residues from agricultural poisons. These are a necessity in modern agriculture to protect crops from insects, mold, and weeds, and in other ways to aid production and prevent spoilage during transportation and marketing.

After FDA sets limits or tolerances for the amounts of such poisons that may safely remain on raw agricultural products, it must enforce these tolerances. This is done through surveillance of the practices of growers, by collecting and analyzing samples for regulatory action if required, and by assisting other groups in teaching growers the importance of following recommended application practices. An essential element in the pesticide program is the development of better, faster methods of detecting and measuring pesticide residues. Progress in this area is reported under Scientific Investigations.

It is estimated that there are 2½ million interstate shipments of raw agricultural commodities a year. In 1962, samples collected totaled 6,978, a marked increase over the 3,148 samples collected in 1961, but still not adequate to make sure that safety rules are being followed. FDA will have a sufficient staff before the end of the fiscal year 1963 to reach a sampling level of 25,000, or 1 percent of shipments, to enable a more accurate appraisal of the problem.

The heavy volume of perishable, seasonal products which move rapidly to the market after round-the-clock harvesting represents a crash program for the inspectors checking pesticide residues. A number of the districts have made effective use of trailer laboratories located in the growing areas, to eliminate transportation of samples to district headquarters laboratories sometimes located several hundred miles away. On-the-spot determination of pesticide residues, with analysis completed before the product reaches its destination, provides more effective enforcement, and also assists local agencies in coping with that part of the problem which is within their responsibility. FDA has continued the practice of notifying both growers and State officials when its analyses of samples show nonpermitted or excess residues on crops.

Twenty-seven seizures totaling 1,903 tons were made of raw agricultural commodities containing illegal residues. Corresponding figures for the previous year were 16 seizures totaling 483 tons.

The largest seizure involved a 748-ton warehouse lot of wheat that had been treated with DDT, lindane, and aldrin during a 3-year storage period, to keep down insect infestation. There is no tolerance for residues of any of these chemicals on wheat.

Ten carloads of wheat and one of barley, totaling 581 tons, were seized because of contamination with seed grain that had been treated with poisonous mercurial fungicides. Fifty-six tons of milo maize were also seized because of contamination with mercury.

Four other seizures of milo maize and milo sorghum followed reports of deaths of several animals consuming the products. Bags of captan and heptachlor for seed treatment had been shipped to a feed dealer in the same car with milo. Apparently some of these bags broke and contaminated the milo. In other cases it appeared that the intact bags were dumped into the feed troughs and were chewed by the animals. Among the other foods and feeds seized for pesticide violations were soybeans with residues of thiram, dried red beans with dieldrin, three lots of alfalfa meal with DDT, three lots of lettuce with DDT (one also containing toxaphene), and two lots of cabbage with residues of endrin.

Severe drouth conditions in the Dakotas were followed by an extremely heavy infestation of grasshoppers. Many roadside areas and marginal croplands were heavily sprayed with dieldrin or aldrin, or both. The drouth also created a serious hay shortage and some farmers allowed their cattle to graze on the heavily sprayed areas.

The situation presented a potential danger of contamination of milk produced from animal grazing on treated lands. A shipment of butter from a creamery in the area was seized because it contained dieldrin. No other Federal seizures of dairy products containing pesticides were made.

A general improvement in pesticide practices of growers has been observed, resulting in part from activities of State officials in quarantining milk with chlorinated hydrocarbons derived from the use of trash feeds, such as packinghouse wastes.

Other Harmful Contaminants

The last report discussed the seizure of 47 carloads—a total of 2,322 tons—of soybeans contaminated with poisonous *crotalaria* seeds as a result of the growing of *crotalaria* plants to improve sandy soils. Only 1 carload, containing 53 tons, was located and seized in 1962. It originated in Mississippi; the contaminated lots found the previous year had been grown in four other States.

Iron fragments that flaked off from rusty machinery into bread crumbs caused one seizure. Another involved iron fragments in cracker meal resulting from the partial disintegration of a mesh conveyor belt when the chain pulling it broke.

A cheese spread was seized because it contained sharp, pointed crystals of lactose monohydrate. The crystals were capable of causing injury. Also seized for potential injury to health were ready-to-freeze confectionery pops on plastic sticks capable of harming child consumers. Five seizures of foods for the illegal use of color additives are discussed under Cosmetics and Colors.

Food Poisoning.—Forty outbreaks of suspected food poisoning involving more than 1,300 persons were investigated during the year to determine whether bacteriological contamination was the cause. Samples of the suspect food involved or from the same lots or dealers were obtained in 12 cases. With two exceptions, the lots remaining on the market were found to be normal. Canned tomatoes involved in one outbreak were shown to be decomposed, and seized. Hollandaise sauce found to be contaminated with salmonella, as mentioned in the report of the preceding year, was responsible for a number of illnesses. The firm discontinued production and the product was removed from the market by recall and seizure.

A majority of the incidents investigated, which involved a large number of individuals, resulted from insanitary handling or from lack of proper refrigeration during preparation or serving of the food.

In a few of these cases, where the suspect food was available for examination, staphylococci in large numbers were identified either by FDA laboratories or by State or local laboratories. In other cases the foods had been consumed or destroyed but the epidemiological evidence implicated staph as the probable causative agent. In one outbreak, involving questionable handling procedures, turkey salad appeared responsible for the serious illness of 176 individuals, and the time of onset and symptoms were suggestive of *Clostridium perfringens* food poisoning.

A California family became ill twice in a few weeks after eating a meal which included commercially frozen potato patties, and one member had to be hospitalized in the second incident. The hospital reported the incident to the county health department which in turn referred the facts to the State health officials which relayed them to FDA. No packages of the suspect patties remained in the family's home freezer, but samples drawn from the retail supplier showed coagulase-positive staphylococci present in quantities sufficient to account for the illnesses, and also contamination with *E. coli*.

An establishment inspection of the commercial freezer, one of the largest potato processors in Seattle district territory, showed the need for improved bacterial and sanitation control of operations. After seizure of a shipment of contaminated patties, the firm initiated a nationwide recall voluntarily destroying an estimated \$211,220 worth

of returned goods, and began capital and procedural improvements costing nearly a quarter million dollars.

Restaurant operators were warned in January to stop using a peeled potato bleach because of contamination of some lots by sodium fluosilicate, a deadly poison. The manufacturer had accidentally substituted this ingredient for sodium bisulfite normally used in the antioxidant compound. Illnesses after eating french fried potatoes in restaurants were reported in two States, but there were no fatalities because the bleach is used in very dilute concentrations. Seizure was made of one lot, and a public warning was issued. The manufacturer recalled all outstanding lots from widely scattered areas.

Potential injury was forestalled when an exterminator company was enjoined to stop using rodenticide "1080" in any way that could result in contamination of stored food. The firm, which provides exterminator services for food warehouses and mills, was charged in the complaint for injunction with causing the rodenticide to be placed in food plants in uncovered bait traps in close proximity to foods.

To Keep Food Clean

With some notable exceptions, continued sanitary improvement was found in most plants.

Increased pressure was put on warehouses, wholesale groceries, and their owners and managers to maintain sanitary storage. Thirty-five criminal prosecution actions were brought against 71 firms and individuals for storage under insanitary conditions resulting in potential filth contamination. Penalties in 36 convictions for such violations during the year ranged from nominal fines with probationary periods to \$6,250 assessed against a firm and two of its officers. Many of the criminal actions have resulted in corrective measures to provide better protection for the stored food.

Sixty-one other prosecutions were filed against manufacturers or shippers of unfit food, and 49 cases terminated during the year were based on preparation of food under insanitary conditions or use of unfit ingredients.

Approximately half of the food seizures and more than 80 percent of the prosecutions of violative shippers and storers of food involved charges of filth and decomposition. The lower percentage of filth seizures as compared to recent years may be attributed in part to the increased attention devoted to detecting economic cheats, such as short weight and labeling violations.

Seizure actions on filth charges dropped from 516 in the fiscal year 1961 to 426 in 1962 and the total volume seized from 8,109 to 7,542 tons. In more than 40 percent of the filth cases the food had become unfit after interstate shipment.

Table 1.—Actions on foods during the fiscal year 1962

Projects	Seizures	Criminal prosecutions instituted	Injunction petitions
Total.....	867	117	13
Beverages and beverage materials.....	33	1	1
Bakery, ready to eat cereal, and macaroni products.....	84	18	1
Cereals, grain products, and feeds:			
Human use.....	140	22	5
Animal use.....	9	1	
Chocolates, sugars, and related products.....	67	5	1
Dairy products:			
Butter and churning cream.....	10	5	
Cheese and other dairy products.....	26		1
Eggs and egg products.....	14	2	
Flavors, spices, and condiments.....	38	1	
Fruits and fruit products.....	61	5	
Meat, meat products and poultry.....	6		
Nuts and nut products.....	78	9	1
Oils, fats, and oleomargarine.....	6	2	
Seafood.....	46	1	
Vegetables and vegetable products.....	92	6	2
Miscellaneous foods (mixed lots).....	7	2	
Warehouse foods.....	106	34	
Foods for special dietary uses ¹	42	2	1
Miscellaneous chemicals (food adjuncts).....	2	1	

¹ Includes vitamin products intended as food supplements.

Voluntary destruction or conversion to nonfood use by owners of filthy and decomposed foods totaled 4,626 tons in 1962. These actions were taken under the observation of Federal or local inspectors after the goods were found during inspections to be subject to seizure if distributed.

There has been widespread use of field bacteriology during inspections of food processing plants where bacteriological contamination is a real possibility. Crabmeat, dressed shrimp, nut meats, and other foods partly prepared by hand, and frozen precooked food are particularly susceptible to such contamination, which may lead to food poisoning outbreaks. One Texas crab packer was sentenced to 3 months in jail and fined because he shipped crabmeat contaminated with *E. coli*. A State health official had traced a food poisoning outbreak to crabmeat from this firm. Two other criminal proceedings terminated by fines were based on *E. coli* found in pecans shelled under insanitary conditions.

After injunction of a bakery in Atlanta the other bakeries in the Southeast reevaluated their flour-handling equipment, housekeeping practices and other sanitation programs, and accelerated those that were lagging. In 14 criminal actions terminated during the year bakeries and their officers or managers were fined for operating under insanitary conditions. One manager was fined \$2,000 for a second offense. The firm moved its plant after the first violation to rid the bakery of rodent contamination, but permitted insects at the new location to become progressively worse despite FDA inspectors' warnings.

There has been encouraging improvement in sanitation in the grain industry in recent years. Close cooperation with State officials continues to foster such improvement. Industry groups have shown their interest by making more requests for FDA speakers at their meetings and for more literature on grain sanitation.

Seizures of rodent-contaminated bulk wheat increased from 53 actions against 2,249 tons in 1961 to 74 actions against 3,820 tons in 1962. An additional 323 tons of insect-infested wheat were seized in 4 actions. Five injunctions were requested of the courts to prevent shipment of unfit wheat and barley from elevators and other storage facilities where adequate ventilation was not maintained. Three were granted and two, forwarded to the Department of Justice near the end of the year, are awaiting action.

A serious situation with respect to rodent and insect filth in several rice mills in the southeastern region of Louisiana resulted from inadequate storage facilities for rough rice, infrequent cleaning of equipment, and improper storage of milled rice. Approximately 237 tons shipped from this area to Alabama were seized, and criminal prosecutions are pending against three shippers.

Incubator rejects are still being diverted to food use, but persons engaged in this illegal practice have gone further underground. Fifty-four tons of decomposed frozen eggs in 30-pound cans and a truckload of 600 cases of reject shell eggs were seized in 14 actions.

A west coast egg dealer was sentenced to 6 months in jail and assessed court costs of more than \$5,600 for shipping rotten eggs. The judge said that the defendant "has been getting away with the use of contaminated putrid eggs for a number of years." The first case against a hatchery in connection with the incubator reject program was terminated with a fine. Companion cases against two dealers in incubator rejects are still pending. They have filed motions to dismiss on the grounds of illegal search and seizure and because standards for decomposition have not been issued.

State officials are cooperating increasingly in tracking down incubator rejects shipments and securing the evidence necessary to convict conspirators in the racket.

The increased surveillance of the New England fishing industry began in 1961 to protect consumers from decomposed fish. The number of violative lots still being encountered points to the need to continue the stepped-up program. In addition to decomposed fish, the amount of parasitized fish encountered has also increased. This problem is especially troublesome in ocean perch (red fish). Twenty-four percent of the lots of imported whitefish examined had to be detained because of the presence of cysts.

Two prosecution cases based on preparation of food oil under insanitary conditions were terminated with fines. Two new prosecu-

tions were filed against other firms and individuals, and several others are being prepared for filing.

The breakdown of controls formerly exercised in parts of the Near East resulted in detention of more than 3.6 million pounds of dates because of insect infestation. Educational work was undertaken to tell the foreign control officials why the dates were refused entry and what steps would be required to bring the dried fruit into compliance.

Pocketbook Protection

Total seizures to protect consumers from economic violations reached 350 in 1962 in comparison with 92 in 1961.

The intensified program against short-weight and inconspicuously labeled foods that was started late in the 1961 fiscal year was continued in full force throughout 1962. More than 70 different foods and beverages were seized in 183 actions because of short-weight or volume. One puffed cereal product ranged up to 15 percent short-weight. The manufacturer started to use an "improved" puffing process which increased the volume beyond the capacity of the carton to hold the stated weight of the old product, but the weight declaration for the new, lighter product was not changed.

The Food, Drug, and Cosmetic Act gives the consumer "the right to choose," by requiring certain information that will assist in intelligent purchasing to appear prominently on the label in understandable terms. There was a sharp increase in the number of seizures charging failure of mandatory labeling to appear conspicuously on the label. Eighty-five seizures were made because this information was hard to find, hard to read, or was partly or entirely missing.

Common causes of "hidden" labeling were the use on transparent bags of printing ink the same color as the product in the background, and other packaging features which did not provide adequate printing contrast. In some cases the type was too small or too blurred to be easily read. Promotional items, gifts, "2-cents off" stickers, etc., were sometimes attached to the original package in such a way as to cover mandatory labeling.

The press focused public attention on FDA reports of seizure of well-known and popular packaged 5-cent candies short-weighted to maintain the customary cost. It also publicized other "pickpocket packaging" and labeling of items displayed to attract selection by customers. Some were soaps, scouring powders, paper goods, and other items not subject to the Food, Drug, and Cosmetic Act.

However, foods, drugs, and cosmetics are also sometimes involved in extravagant and misleading promotions via the labeling and then may be subject to control under the Food, Drug, and Cosmetic Act. An example encountered during the year was instant coffee labeled

"Giant Economy Size," which actually cost more per ounce than the same product in smaller containers. It was seized on charges of false and misleading labeling.

Court actions were also taken against foods that were below official standards, or did not have the composition claimed on their labels. The 1961 report discussed an episode in which the "pure orange juice" was adulterated with sugar and water by surreptitious operations in the warehouse and factory. In September 1961, the president of the firm was fined \$1,000 for perjury in the trial reported last year and received a suspended 5-year jail sentence. The previous sentence had been a 6-month jail term for this defendant and fines totaling \$20,000 for the firm and its principals. Both sentences are on appeal.

After a 9-day trial, a chain store and one of its employees were convicted of shipping enriched bread deficient in enrichment, and were fined \$5,500 and \$2,000 costs. The court instructed the jury to disregard charges of failure to declare the minimum daily requirements statements called for by the regulations, since he did not agree that enriched bread could be considered a dietary food.

Among the other substandard items seized were noodles containing less egg solids than the quantity fixed by standards, "early June" peas prepared from soaked dried peas, low-fat butter, canned peaches and other fruits not packed in heavy sirup as labeled, canned beans with excess fibers, artificially colored canned cauliflower, strawberry preserves containing cherries in lieu of strawberries, and an avocado salad dressing that did not meet the official specifications for salad dressing.

Charges that foods did not meet their labeled composition were made in seizures of low-quality salmon deceptively labeled as the pink variety, grouper fillets labeled "red snapper," broken pieces of shrimp instead of the whole shrimp promised by the label, an artificially colored product declared to be paprika, cheese with artificial holes sold under a "swiss" label, imitation lemon-flavored crystals palmed off as dehydrated lemon juice, grapefruit juice with a sodium compound added to make it appear to be the juice of mature fruit, and frozen orange juice concentrate adulterated with sugar and water.

FOODS FOR SPECIAL DIETARY PURPOSES

Of about 100 seizures of vitamin products and other foods for special dietary uses, 16 were substandard in labeled potency, 6 failed to bear the special labeling required of such products, and 2 were contaminated with filth. Sixteen seizures were based on folic acid content in excess of 0.4 milligram of folic acid per daily dose and not labeled for sale upon prescription only.

The principal violation of the labeling requirements of foods for special dietary uses involved low calorie claims for foods not entitled to such designation. Recently published proposals for revised regu-

lations for special dietary foods contain specific provisions aimed at curbing abuses in labeling foods for use in weight-control diets.

The remaining seizures were based on false and misleading claims for the cure or prevention of disease. Some of the most significant are discussed below.

Nutritional Quackery

An estimated \$500 million is wasted by the public each year on unneeded vitamins and faddist food products. Most of them are foisted upon the public by false representations that sound health is impossible without the addition to the diet of the special item promoted. Usually the myth is propounded that our soils are depleted because of years of intensive cultivation, and our food supply is poor because of modern commercial methods of production and processing. Contrary to this propaganda, the fact is that the American food supply is unsurpassed in quality and nutritional value. A balanced diet of foods available throughout the land supplies all of the average individual's nutritional needs.

The problem of enforcing the law against nutritional quackery is greatly increased by lack of knowledge on the part of the public of the true facts of nutrition. Reference is made earlier in this report to the first meeting of the National Congress on Medical Quackery sponsored by the AMA and FDA. In March these organizations and the National Better Business Bureau were joined by the Association of Colleges of Pharmacy in efforts to issue and distribute informative public statements to combat nutritional quackery.

Seizure, injunction, and criminal prosecution actions were completed during the year against several purveyors of sea water and sea salt who made use of the writings of Dr. George W. Crane, a nationally syndicated medical newspaper columnist. In his columns, which were widely reprinted by sellers of sea-water products, he extolled the virtues of minerals derived from sea water for practically every serious disease of mankind, including cancer, but with special emphasis on arthritis and other afflictions of the aged. In comparison with ordinary table salt, any usable quantity of ocean water would supply insignificant quantities of needed mineral nutrients, in addition to the fact that none of the serious diseases for which claims were made are caused by mineral deficiencies in the diet.

Several seizure actions were instituted during the year against Nutri-Bio, a vitamin-mineral supplement nationally promoted through door-to-door peddling by approximately 75,000 distributors. In the privacy of the prospects' homes many of the peddlers made claims for cancer, heart trouble, diabetes, tuberculosis, and other serious diseases. They also recommended the supplement for persons showing lack of normal intelligence, for "radiant living," and for preven-

tion of "premature death." Many of these claims were incorporated in a book written by Bob Cummings, a movie and TV actor who was designated by the Nutri-Bio corporation as executive vice-president in charge of research. The book was also displayed to sell the supplement in some cases. Other promotional material charged to contain misleading claims included sales manuals, sales and recruiting kits, leaflets, reprints of magazine articles, records, and filmstrips. The area salesman in Chicago alone destroyed 50 tons of books and literature after FDA charged that this material contained false claims.

Criminal and injunction actions were completed against Dr. Royal Lee, a nonpracticing dentist who recommended more than 115 so-called nutritional products for more than 500 different diseases and conditions. The recommendations were made in articles in a "Therapeutic Food Manual" and in other writings of Dr. Lee. These products were administered primarily by practitioners whose licenses did not permit the use of drugs, but who nevertheless prescribed the articles for incurable and fatal diseases, as well as for many conditions which could have been cured or alleviated by proper treatment. Also enjoined were the two related corporations, Vitamin Products Co., Inc., headed by Dr. Lee, and the Lee Foundation for Nutritional Research, a nonprofit foundation set up by Dr. Lee for "research" and sales of the literature promoting his products. In the criminal action the Vitamin Products Co., Inc., was fined \$7,000, and Dr. Lee received a suspended 1-year prison sentence.

Another major promotional effort that ran afoul of the law during the year involved safflower oil for weight reduction and for lowering of blood cholesterol, associated by the public with prevention of heart disease. A best-seller book "Calories Don't Count" written by a physician and stockholder in Cove Vitamin and Pharmaceutical Inc., was used to promote sales of the product and was charged to be misbranding labeling. In addition to misleading weight control claims, the seizures were based on false and misleading claims in the book and other labeling for lowering the cholesterol level of the blood, for treating arteriosclerosis and heartburn, for improving the complexion, for increasing resistance to colds and sinus trouble and promoting health, and for increasing sexual drive. The firm denied the Government's charges, but later withdrew from its contest of the case. The firm then ordered a recall of all outstanding capsules. There were also seizures of other safflower oil products during the year.

Nature Food Centres, a corporation selling "natural and organic" foods, and two of its officers were convicted for shipments of food products represented for the treatment of many serious diseases. One of the defendants during public lectures in Philadelphia and Chicago, in an effort to promote sales of the products, represented them to be

effective for the treatment of conditions ranging from heart diseases and hepatitis to mental sluggishness, impotency, and colds. Fines of \$5,000 for each individual and \$10,000 for the firm represented the highest total fines assessed during the year.

Royal jelly, a substance secreted by bees to feed the queen bee, has been promoted as a "miracle" ingredient to increase sexual vitality, extend the life span, normalize the growth of underdeveloped children, cope with the ailments of old age, improve memory, stimulate the appetite, etc. A vigorously contested trial of the seizure of a shipment of royal jelly, Jenasol RJ Formula, in 1962 gave FDA its first court victory to establish such claims as unfounded. Following the decision in favor of the Government, the court granted its request for an injunction to prevent further misbranding of royal jelly by the firm. Numerous other actions against royal jelly products have been won by default.

In another case involving the product of bees, the Government seized 1½ tons of honey misbranded with misleading claims for the treatment of waning virility, arthritis, weak heart, and as a cure for premature death. Lelord Kordel, a "health food" lecturer, is president of the distributing firm. The honey did not differ from ordinary honey.

One product misbranded by false and misleading claims for losing or gaining weight and for figure control had been extolled by Jack LaLanne in a nationally televised calisthenics show.

Carrot juice and beet juice were seized on the basis of labeling claiming effectiveness for cancer, cardiac conditions, rheumatism, anemia, infectious diseases, etc. Garlic tablets were seized because of misleading claims for reduction of high blood pressure.

Forty-three of a mail-order distributor's line of vitamin, mineral, and other food supplements were seized because of misbrandings in the course of national radio broadcasts by Carlton Fredericks, a self-styled nutrition expert. He recommended the products for such conditions as circulatory and respiratory diseases, club feet, multiple sclerosis, sexual frigidity, cerebral palsy, tooth decay, grey hair, strokes, and many others. The Government also charged as false and misleading the broadcaster's claim that he is "America's Foremost Nutritionist." This statement appeared on the front cover of his diet book entitled "Eat, Live and Be Merry" which was seized in a "health food" store where it was displayed beside the supplements.

In June 1962 a major overhaul in the special dietary food regulations was proposed as a step toward curbing nutritional quackery. These regulations spell out the specific labeling information deemed necessary to facilitate intelligent purchase and use. The new proposals would replace regulations in effect since 1941 and made obsolete by scientific progress in the field.

An organized attempt to block the proposed changes by those wanting "health foods" to remain in status quo resulted in a deluge of protests to Congress and the Department. Thousands signed postcards furnished by organizations opposed to the regulations. Many of those who filled out the cards obviously misunderstood the proposals. They had been led to believe that the regulations would require prescriptions for vitamin and mineral products, put "health food" stores out of business, and interfere with the sale of nutritional products from natural sources.

On the contrary, the proposed regulations are an attempt to give consumers the advantages of 1962 knowledge of nutrition and are not intended to prevent the sale of any useful, honestly represented product. They aim at providing the public with labeling facts needed for intelligent purchase, and at curbing "shot-gun" formulas containing 50 to 75 ingredients of which only a handful have been proved to offer nutritional benefits. The time for receiving comments was extended for 2 additional months, making the final date mid-October.

DRUGS AND DEVICES

Recalls.—Sixty-seven defective or misbranded drugs were recalled by manufacturers during the year, either on their own initiative or at the request of FDA. Thirty-seven were defective because of such failures as low potency, nonsterility, high moisture, off-taste or odor, lack of stability, poor consistency, use of a delisted color, and internal pressure causing bottles to break.

Seven of the recalls were made because of labeling errors, two of which caused injuries. One was an analgesic containing alcohol, menthol, and methyl-salicylate which was labeled as an eyewash and resulted in a severe eye injury. The other was turpentine labeled as castor oil. Although the firm knew of the mixup shortly after distribution, it made only feeble efforts to recall. FDA did not know of the error until an injury complaint was received.

The suspension of applications for new drugs which caused adverse reactions is discussed under New Drugs. Recalls were conducted for outstanding stocks of each of these products. In another adverse reaction case, the firm issued a recall letter to 250,000 physicians, wholesalers, and direct account pharmacies but called for a hearing when FDA recommended that it request a suspension of its application. (This hearing resulted in the suspension after the close of the fiscal year.) Three other recalls involved new drugs not covered by effective applications.

Injuries caused the recall of soda mint tablets and a tuberculosis drug both of which were contaminated by stilbestrol. Cross-contamination had resulted from failure to clean processing equipment

thoroughly before starting the manufacture of another drug. Another recall was made of a penicillin product contaminated with sulfonamides.

Antibiotics seized included two intermammary infusions which left penicillin in the milk of the treated cows, and antibiotic sensitivity discs for which certification had been suspended pending correction of objectionable control procedures. In another case, FDA requested the manufacturer to recall penicillin shipments when an FDA inspector discovered during a factory inspection that samples submitted for certification were not representative of the batch.

After continued promotion of a drug seized for false and misleading claims to cure acne, the Commissioner made a finding that the labeling was "in a material respect misleading to the injury or damage of the purchaser or consumer." This finding, under which multiple seizures can be made, brought agreement by the firm to recall shipments.

One veterinary preparation, an iron injection manufactured to the prescription of a veterinarian, was recalled when 168 steers of the 172 injected died.

Illegal Sales of Prescription Drugs

Illegal sale of dangerous drugs and their diversion into bootleg channels continue to be a serious problem. Most frequently involved are the amphetamine drugs. Abusive use of these drugs may cause highway deaths, mental and physical deterioration, juvenile delinquency, and crime.

Barbiturates now rank second as the drugs most often involved in both bootleg and unauthorized pharmacy sales. Tranquilizers and hormone preparations are also found among the drugs being sold without prescription or without authorization for a refill of an original prescription.

Of 136 criminal cases terminated during the year on charges of illegal sales, 40 involved unlicensed outlets, such as truckstops, cafes, and peddlers, some of whom sold in wholesale quantities. Ninety-four actions were based on sales by drugstores or licensed pharmacists without prescription. Two physicians were prosecuted for sales without a bona fide doctor-patient relationship.

Fifteen unlicensed individuals and five pharmacists were required to serve prison sentences ranging from 1 day to 2½ years. Twenty-eight others received jail sentences which were suspended on condition that illegal sales be discontinued. New criminal cases started during the year numbered 150. Particular attention was given to investigations to learn where these dangerous drugs are first diverted out of legitimate channels to bootleg channels of distribution.

One couple was prosecuted in three Federal courts for participation in a ring engaged in illegal peddling of amphetamines to truck stops and filling stations in the Southeastern States. The two were fined a total of \$21,000 in the three cases. The husband was sentenced to a total of 4 years in jail (later reduced to 2 years) and the wife to 1 year plus 1 additional year suspended.

A 2½-year jail sentence was assessed against an individual who supplied this couple and other large bootleg peddlers. The case was based on the purchase and illegal distribution of about 6 million tablets and capsules of drugs, largely amphetamines. In passing sentence, the Federal judge called attention to the fact that the defendant had attempted to buy additional large quantities of the drug after his arrest.

Three "goof ball" peddlers were arrested for sales of barbiturates and amphetamine in the Newark area. A fourth criminal information was filed against a man already in jail on another charge. Most of the sales by the gang were to teenagers. A number of injuries requiring hospitalization were associated with this distribution.

A Maine physician pleaded guilty to selling large quantities of barbiturates and amphetamines outside of his legitimate practice. He was fined \$5,000 and received a 6-month suspended jail sentence. Other doctors and a hospital had complained to FDA that this physician was selling amphetamine by mail to patients under care of other physicians. FDA inspectors who posed as patients were not given physical examinations but were able to buy the drugs in peanut butter and coffee jars even after they told him they were reselling the drugs.

An Arkansas physician was fined \$1,000 and placed on probation after his arrest in a tourist cabin while attempting to sell 200,000 amphetamine tablets to FDA inspectors posing as drug peddlers.

Seizure was also made of amphetamines in possession of a Pennsylvania physician who had sold an FDA inspector 10,000 tablets and had some 12,000 when the U.S. marshal made the seizure.

In another case, an unlicensed, self-styled naturopath was sentenced to 2 years in jail for selling barbiturates and tranquilizers in the guise of a practicing physician. The jury found him guilty on 12 counts charging illegal sales.

State enforcement agencies have been increasingly active in attacking the problem of illegal sales of dangerous drugs. Some of these agencies have laws permitting them to take action on the basis of illegal possession of drugs, thus they are not required to obtain evidence of traffic in them. Their inspectors have also given effective assistance to FDA inspectors in obtaining the proof needed for Federal prosecutions.

Safety Controls

The 1961 report discussed new regulations that will require manufacturers to provide the medical and pharmaceutical professions with more information in the labeling of prescription drugs. It also outlined changes in the new-drug regulations which require the manufacturer to submit more samples of new drugs and their ingredients and information concerning tests run so that FDA may check the firm's control procedures. The marketing of a new drug may be held up until FDA has made a complete factory inspection.

Twenty-five drugs were seized because they did not have new-drug clearance, in comparison with 11 in 1961. An injunction and a criminal prosecution case based on cancer "cures" shipped without effective new-drug applications are discussed under Medical Quackery.

One firm enjoined from shipping new drugs without safety clearance had not even been attempting to submit applications for such clearance. A previous new-drug application granted under another firm name had been suspended after investigations disclosed significant variations from claimed procedures. In discussing the probation report filed before a permanent injunction was granted, the judge made the following comment " * * * there isn't really very much in the report to commend the defendant favorably to this court and, in fact, some of the interested agencies have described and characterized the defendant as a con-man, you might say, in the food and drug business * * *."

The 1960 report told of the conviction of the operator of a drug testing laboratory for giving faked data on drug analyses made for small drug manufacturers. He was fined, given a 1-year suspended jail sentence, and placed on probation for 3 years under strict supervision of FDA. When it was found that he was continuing to fake his reports of analyses, he was brought back to court for violation of his probation. He was found guilty after a 3-day trial in the fall of 1961 and was sentenced to 6 months in jail, fined \$2,000, and his probation period was extended to a total of 5 years. The court later vacated the jail sentence on a plea that the defendant was showing signs of mental illness.

Thirty-six drugs (excluding dietary products, devices, and medicated feeds, which are discussed separately) were seized because they were below labeled composition, or failed to meet official standards.

New regulations became effective in February 1961 requiring prescription drugs to bear lot control numbers. The first seizure for violation of these requirements was made in November of shipments of reserpine and a sulfonamide from which the control numbers had been scraped off from the labels while the drugs were in original manufacturers' packages. These lot control numbers are needed by both

the manufacturer and FDA to pinpoint the affected lots if something is found wrong with the drug.

Counterfeit Drugs

Two surveys of the extent of drug counterfeits on the market were made in the summer of 1961. No counterfeits were found in a 1,300 sample survey of those drugs believed likely candidates for counterfeiting but not previously known to be counterfeited. These are drugs of relatively high cost used over long periods of time for chronic ailments, and purchased in large quantities by retail druggists.

The second survey covered 300 drugstores known to have done business with a leader of the counterfeit ring who had been indicted for distributing counterfeit drugs. Thirty-two of these stores were found to have counterfeit drugs in their possession.

In February 1962 this ringleader and his son whom he employed pleaded guilty in Federal court in Texas. The father was sentenced to jail for 6 months and fined \$1,000. Payment of the fine was suspended, and he was placed on probation for 5 years. The son was placed on a similar probation after a 1-year jail sentence and \$1,000 fine had been suspended. Both face prosecutions in Federal courts in Louisiana and New Jersey for participation in the counterfeit drug racket. A number of criminal prosecutions were filed for the dispensing of counterfeit drugs. One of these cases has been terminated with a \$3,000 fine.

Apparently these criminal actions and seizures of counterfeit drugs, which were largely effected before the prosecutions, have virtually stopped the counterfeit racket, at least temporarily.

Repacked Physicians' Samples

About 40 seizures of drugs valued at more than \$1 million were made during the year in a program to curb dangerous abuses in the collection and selling of discarded physicians' samples. Most of these cases involved repacking, usually by the dealers whose stocks were seized.

In the repacking cases, the Government charged that the drugs were misbranded because of the absence of all or part of the labeling required to maintain the integrity and safety of drugs. Information lost in the repackaging operation included the common or usual name of the drug and each active ingredient, adequate directions for use, lot or control numbers, expiration dates for drugs with a limited shelf life, the statement "Caution: To be dispensed only by or on prescription of a physician," and the name and address of the manufacturer.

Mixups encountered in the repacked samples illustrate the extremely hazardous nature of such operations. In two instances the repacked bottles bore names of drugs different from those they con-

tained. In another case there were two different strengths of the same drug actually in one bottle. Outdated antibiotics and overage drugs were encountered, as were new drugs still in investigational status. In several instances drugs were found in completely unlabeled bottles.

Retail drugstores have for the most part cooperated with FDA in its efforts to correct the physicians' sample situation.

Medical Quackery

Sixty-six seizures and seven criminal cases were filed charging false and misleading curative claims for drugs.

Actions were taken against the promoters of several worthless cancer cures. A jury found a firm and its secretary-treasurer guilty of promoting Millrue, a product labeled as an "iron tonic," for cancer, arthritis, diabetes, ulcers, high blood pressure, and other serious diseases. The court assessed a total fine of \$7,500 and sentenced the secretary-treasurer to 6 years in prison, to be followed by 3 years of supervised probation. He had been convicted on similar charges in 1958. This is the maximum jail sentence the law provides for a second-offense violation on a two-count information. Millrue was distributed by agents and "health food" stores, and was advertised in a "health" magazine. The defendant personally filled mail orders induced by these ads and although he had no medical training, he also engaged in consultations with prospective customers during which he "diagnosed" their ailments as cancer or diabetes and recommended the use of his tonic.

Another cancer "cure," KC-555, was banned by a Federal court injunction on the grounds that it was shipped as a drug without a prior showing of safety. It was an African-grown herb juice to be mixed with wine, and was labeled in part "it is used as an adjunctive treatment in malignant diseases, and as a stimulant when you feel run-down or listless."

The Laetrile cancer remedy was exposed as worthless in California medical circles more than 9 years ago. When recent Federal investigations showed interstate traffic in a number of drugs not cleared for safety, criminal prosecution was filed against Ernst T. Krebs, Jr. and the "John Beard Memorial Foundation" he directed. In March they were fined, and Krebs was placed under probation for 3 years, with conditions strikingly similar to those of injunction decrees.

The last report discussed an attempt to revive the worthless Koch cancer injection and the suspended jail sentence and probation issued to stop the sale of the treatment at a clinic in Texas. When FDA learned that the clinic operator was still shipping the treatment, FDA inspectors and a deputy marshal found 12 hypodermic syringes under a sofa in the operator's living room, together with correspondence

which showed that he had never stopped his activities. He was sent to jail for 2 months for violating the terms of his probation.

There are millions of arthritics in this country who will grasp at any straw in the hope of relief from pain. Many are led to believe in so-called cures for arthritis because of remissions which naturally occur in the disease. This sets the stage for unscrupulous promotion of worthless remedies. Numerous seizures were made of such products, and in June a mail-order firm, the manufacturer, Specifics Drug Co., and individuals associated with them in the distribution of Specifex Adrenal Hormone Cream were permanently enjoined from interstate shipment of the ointment. Mail-order sales had soared on a nationwide scale in recent years because of false claims of curing rheumatism, arthritis, fibrositis pains, and for other pain-associated conditions. One of the statements made in promotional literature was "Rush by Return Mail * * * Works Like a Shot."

Seizures of more than \$185,000 worth of Acnotabs, promoted as "medical science's latest discovery" for treating acne (pimples) in teenagers, followed the Commissioner's multiple seizure findings mentioned under Recalls. While a contested seizure was awaiting trial the firm continued to promote the tablets with such misleading claims as "Remarkable new tablets work internally as no lotion, no ointment possibly can! Pimples clear up beautifully—AND YOU DON'T GIVE UP SWEETS!" After the multiple seizure findings the company recalled many outstanding shipments to avoid further seizures until the first seizure was tried in court. (The Government was upheld in this action after the close of the fiscal year.)

Seizure of a coated chewing gum containing essential oils and a small quantity of benzocaine was made on charges of misleading claims that the gum would aid the appetite and aid in reducing. The labeling of the gum claimed "Eat What You Want—Yet Lose up to 3-5-9 Pounds a Week," and included menus suggesting a restricted daily intake of about 1,200 calories. The claimant contested the seizure and the district judge ruled that the Government did not sustain its burden of proof. The Government lost an appeal in which it contended that the claimant's own evidence did not substantiate the labeling claims.

Medicated Feeds

Figures are not available as to what proportion of the 42 million tons of animal feed manufactured in 1961 was medicated, but the volume was immense and it is increasing year by year. The addition of antibiotics, hormones, arsenicals, and other drugs to feeds has revolutionized livestock and poultry production and brought many important benefits. Production costs have been reduced, output increased, and animal diseases brought under more effective control.

This, in turn, is reflected in what the consumer pays for poultry, meat, eggs, and dairy products.

But the use of drugs in feeds also has presented potential health hazards that have conferred tremendous new responsibilities on FDA. The agency must refuse to sanction the use of any feed additive that would injure either the animals fed or the people consuming food derived from them. Directions for use must be adequate to result in safe use if they are followed.

The feed mixer must demonstrate that the manufacturing procedures he will use will assure uniformity and labeled potency of the feed before his new-drug application for permission to manufacture and market the medicated feed will be cleared. Inspection is necessary to check on processing procedures or to catch misuse of medicated feeds. Laboratory analysis of samples of the finished feed is a necessary final step and represents another heavy workload for FDA.

Twenty-eight lots of medicated feeds were seized in 1962, compared with five in 1961. Five criminal actions and one injunction were filed in 1962—one criminal case in 1961.

In five of the seizures the manufacturer had not obtained safety clearance to mix the drug in his feed. In eight other seizures non-certified antibiotics had been incorporated in violation of regulations.

In nearly half of the seizures the feeds were either above or below the strength declared on the label. The gravity of overdosage was demonstrated by a turkey feed that killed more than 700 turkeys. It contained about twice the labeled amount of drugs added for treating poultry diseases and stimulating growth. The firm was fined and permanently enjoined from further shipments.

In three seizures the Government charged false and misleading veterinary claims.

New Drugs

There were 693 new drug applications received during the fiscal year; 282 for human and 411 for veterinary drugs. Within the same period 273 applications became effective; 109 for human and 164 for veterinary drugs. A total of 1,110 communications on effective applications for human drugs and 2,387 for veterinary drugs was also handled including many formal supplements. Of the supplements, 760 were made effective for human and 427 for veterinary drugs.

Safety clearances previously granted for five drugs for human use were suspended on the basis that clinical experience since the applications became effective showed that they were unsafe for use. Since some of these drugs were included in different products, the suspensions applied to 10 applications. All products were promptly removed from the market. The drugs concerned were: (1) *zoxazolamine*, used for

relaxing skeletal muscle spasm and also for increasing excretion of uric acid in gout. It was found to cause severe liver damage in some instances. (2) *amphenidone*, a mild tranquilizing agent for the relief of anxiety and tension. Agranulocytosis, a serious blood condition, was encountered in some patients. (3) *triparanol*, used to lower blood cholesterol. Evidence developed associating it with cataract formation, loss of hair, and certain skin conditions. (4) *etryptamine acetate*, for relief of mental depression in psychiatric conditions. Agranulocytosis was also encountered with this drug. (5) *thihexinol methylbromide*, an atropinelike drug used for the treatment of diarrhea. Atropinelike side reactions occurred in infants, and the labeling claims went beyond those authorized in the original safety clearance.

Approximately 6 months prior to the suspension of the application for triparanol, the distributor, in collaboration with the Food and Drug Administration, issued a letter to physicians informing them of toxic effects which had been encountered with the product. At that time the evidence was not deemed legally sufficient for suspension of the safety clearance. Additional information, resulting in part from this publicity and from continuing investigations, made it evident that the product should no longer be marketed.

Also in collaboration with the Food and Drug Administration, distributors of two drugs, triacetyloleandomycin and erythromycin estolate, issued letters to physicians calling attention to liver injuries resulting from use of the drugs in investigative studies and in general practice after the drug was cleared for distribution. The letters enclosed revised package inserts which referred to the above effects. One product containing triacetyloleandomycin in combination with other drugs was seized on charges that its labeling included claims extending beyond those provided for in the effective new drug application.

As discussed in the Introduction, an application was prevented from becoming effective for a sedative and hypnotic, thalidomide. This drug was marketed in other countries and was later shown to cause serious malformations of the fetus when used in early pregnancy.

New regulations, discussed in the 1961 report, requiring applicants to submit specific samples with applications, have permitted the testing of the adequacy of the manufacturers' methods in district laboratories on approximately 40 applications. The authority in the regulations to verify by factory inspection the adequacy of a manufacturer's facilities and controls has been used to advantage in evaluating approximately 20 applications.

Significant drugs on which favorable action was taken during the fiscal year include one for dilating the coronary arteries (dipyridamole); an intravenous blood-pressure-elevating agent for the treatment of shock (angiotensin); one for lowering the blood pressure

(mebutamate); another potent diuretic which also helps to lower blood pressure (polythiazide); a drug for the palliative treatment of some types of cancer (5-fluorouracil); an anti-infective sulfonamide (sulfamethoxazole); one for the control of itching (cypheptadine); two anti-inflammatory steroids for topical use (fluandrenolone and fluocinolone); a tissue-building steroid (stanozolol); and an androgenic steroid for treating inoperable cancer of the breast (dromostanolone propionate); a diagnostic agent for testing function of the pituitary gland (methopropone); two drugs for relaxing smooth muscles and which aid in the treatment of peptic ulcer (clidinium bromide and glycopyrrolate); a mild tranquilizing agent (hydroxyphenamate); an agent for the control of nausea and vomiting (thiethylperazine); a drug for the treatment of vascular headache (methoxyflurane); an oral contraceptive agent (norethindrone and ethinyl estradiol); two drugs for the control of cough (pipazethate and levo-propoxyphene 2-napsylate); a progestational agent for the treatment of menstrual abnormalities (isopregnenone); some oral enzyme agents recommended for the treatment of inflammations and injuries; and some radiopaque compounds for use in X-ray examinations.

Devices

Of 57 devices seized, 40 were charged to be misbranded and 17 to be defective. The latter included 14 shipments of rubber prophylactics with holes, two of clinical thermometers that did not register accurately, and an automatic metering infusion set that did not deliver the flow at the rate indicated on the meter.

Shipments of seven types of worthless devices to health practitioners throughout the country by Electronic Instrument, Inc. (Ohio) were permanently banned by an injunction order in April 1962. The electronic and diagnostic devices were accompanied by literature containing claims for treating disease conditions of the brains, tonsils, prostate, spinal cord, trachea, lungs, kidneys, stomach, heart, liver, and numerous other diseases. Some are supposed to measure electrical frequencies emanating from the body, although such frequencies do not exist, and then match them with high-frequency electrical currents which give the patient nothing but a tingling sensation.

Thousands of the instruments, costing up to \$1,000 each, have been distributed to practitioners over the years, and a number have been seized—eight in three actions shortly before the injunction order. The use of these devices by health practitioners can in no way help patients, and great harm may be done by reliance upon them.

Fred J. Hart, president of the Electronic Medical Foundation (California), who was permanently enjoined in 1958 from distributing

13 misbranded diagnostic and treatment devices based on "emanations" supposedly given by a drop of blood, was prosecuted during the year for criminal contempt of the injunction. He was fined just after the close of the year. The action was based on delivery of one of the banned devices, Short Wave Oscillotron, to an out-of-State practitioner in July 1961. The foundation he headed, which was dissolved just before the contempt case decision, was set up many years ago as the College of Electronic Medicine by the late Dr. Albert Abrams, inventor of many of the electro-medical theories involved in previous FDA device actions.

Another injunction ordering the Ellis Research Laboratories and Robert W. Ellis, president, to stop misbranding a diagnostic electrical device, Micro-Dynameter, brought an appellate court finding that the device was not safe even in the hands of a licensed practitioner. The FDA Commissioner called the machine "a peril to public health because it cannot correctly diagnose any disease." On June 11, 1962, the Supreme Court refused to review the actions of the lower court.

Over 5,000 of the devices had been sold, for as much as \$875 each, with promotion through about 50 items of misbranding labeling, including hard-cover books, pamphlets, case histories, and alleged scientific research reports. The first seizure, effected in 1954, charged that false and misleading claims were made for cancer, tuberculosis, tooth decay, and 30 other diseases and conditions.

After the Supreme Court refused to review the case, a nationwide seizure campaign was immediately instituted in an effort to take the device out of the offices of health practitioners. Publicity given to the injunction and seizure campaign by the press, State enforcement agencies, and practitioners' associations, brought many offers by practitioners to destroy their machines, thus making seizure actions unnecessary. Other practitioners, and some of their patients, have vigorously protested the seizures.

Another type of device seized was massaging instruments for beautifying the face and figure, toning flabby muscles, removing "dowager's hump" and double chin, reducing weight, relieving tension, curing fallen arches, and improving skin texture. Adolphus Hohensee, a "health lecturer" promoting a massage device for such diseases as cancer, was arrested by New York City authorities when he protested seizure of the device and precipitated a disturbance among his students.

Various types of "air purifiers," ranging from vacuum cleaners to devices to force air through canisters of activated charcoal, were charged with making false and misleading claims for relief from hay fever, sinus, and asthma allergies; killing air-borne bac-

teria; counteracting substances in tobacco smoke to protect the smoker from lung cancer; banishing irritation of nose and throat membranes; and preventing infections and parasitic diseases. A Federal court decree filed in the District of Columbia against continued misbranding of Puritron devices drastically limits the claims which may be made for health benefits from household air purifiers.

Other devices seized included lamps for the treatment of aches, pains, and skin problems; juice extractors claimed to produce juices beneficial for cancer, arthritis, colds, ulcers, etc.; quartz broilers to prepare healthier foods, protect against heart disease by destroying cholesterol in food prepared in them, and permit one to live longer; a bust developer; and a number of other devices with serious claims.

Three types of devices were charged to be potentially dangerous as well as worthless. An injunction decree was issued against Mercier Radioactive Devices that were dangerous to both the practitioner and the patient because of leakage of radioactive materials. The device supposedly radiated blood drawn from the patient, and the blood was to be re-injected to "increase the energy quantum in the blood plasma."

An ultrasonic device was seized in possession of a masseur not licensed to use it. Such devices may cause injuries when used by the ignorant or unskilled.

Also seized were electric toothbrushes and gum massagers that might cause severe or fatal shock after immersion in water. Contrary to labeling claims, the motor and cord units were not sealed. The Government also took exception to the claim that it offered "the best in a complete home dental treatment."

COSMETICS AND COLORS

Nearly 32,000 bottles of hair dressing were seized in 13 actions against a cosmetic counterfeiting operation. The counterfeiter had recently been sentenced on a currency counterfeiting charge. The counterfeit cosmetics could be easily detected because the dressing, containers, and labels all differed from the genuine. The product itself contained coal-tar colors not present in the imitated product, and the container and labels differed in several respects. For example, light would pass through the counterfeit label, whereas the genuine label is lightproof.

Another seizure removed approximately 17,000 plastic tubes of deodorant from the market on charges of inconspicuous labeling. The product was distributed through orders taken by door-to-door salesmen. The labeling, in small print, was formed in the plastic container and was the same color as the background. It was placed

on the plastic plunger by which the deodorant stick is pushed up out of the container as it is used. This made it progressively less readable as the product was used up.

Inconspicuous labeling was also charged in the seizure of a spray perfume. A window placard explained the symbols used for different scents of "Famous Name Perfumes," but only the symbols were used on the individual cartons, which did not bear the name of the manufacturer, packer, or distributor.

Two shipments of eyeliner pencils, eye shadow, and mascara of various shades were seized because of use of synthetic organic colors that had not been provisionally listed for cosmetic use. One line had been manufactured in Paris; the other lot was of domestic origin. Another eye cosmetic containing a nonpermitted dye was recalled from sales distribution.

Foods seized because they contained unpermitted colors included two shipments of a cake mix containing the delisted FD & C Red No. 1, popcorn oil containing the delisted FD & C Yellow No. 4, imported bottled cherries in cherry liqueur containing an isomer of FD & C Red No. 2 not covered by a regulation or exemption, and imported red plums containing a noncertified coal-tar color.

CERTIFICATION SERVICES

Color Additives.—All color additives used in foods, drugs, and cosmetics (except hair dyes) must be listed for such use pursuant to the Color Additives Law of 1960. Synthetic organic colors used must be from batches certified by FDA as safe for such use. In 1962, 5,798 batches representing over 4,088 tons were certified, and 37 batches representing 9 tons were rejected.

Insulin.—All batches of insulin must be tested and certified by FDA before distribution. Examination of 362 samples resulted in the certification of 294 batches of insulin drugs and 60 batches of material for use in making insulin-containing drugs. One batch of protamine zinc insulin was rejected because it contained excess protamine. The request of approval of one trial mixture of isophane insulin was withdrawn because the composition of the materials was questionable. Four batches of 20-unit insulin were found suitable for use at the labeled strength, but were not of a strength listed as certifiable under the FDC regulations. Two batches of insulin held in cold storage from 5 to 8 years by the Office of Defense Mobilization were found to have retained 88 percent of the labeled potency. These batches are usable in an emergency if no better product is available, but certification ceased to be effective when the expiration date had passed.

Antibiotics.—The predistribution testing and certification of certain antibiotics also were provided for by amendments to the act,

before the Drug Amendments of 1962 included all antibiotics for human use under the certification provisions. Examinations were made of 15,539 batches of penicillin, streptomycin, dihydrostreptomycin, chlortetracycline, tetracycline, chloramphenicol, bacitracin, sensitivity discs, amphotericin, erythromycin, neomycin, novobiocin, nystatin, triacetyloleandomycin, and polymyxin. The last seven antibiotics mentioned were not subject to certification but were submitted for testing to determine their suitability for use in combination with certifiable antibiotics.

Of the samples tested, 183 were unsatisfactory because of failure to meet the following standards: potency and purity (110), moisture (22), pyrogens (18), sterility (13), pH (9), heat stability (4), uniformity (2), resuspension difficulties (2), short volume (1), crystallinity (1), and solubility (1). The rejection rate is deemed significant in view of the fact that the batches rejected had undergone rigorous testing by the manufacturer in anticipation of Government tests before samples were submitted.

Six hundred and four sensitivity discs were certified and 32 were rejected. Other Government agencies submitted 1,066 batches of antibiotic preparations for potency testing before extending their expiration dates, and 1,559 official and investigational samples of drugs, medicated feeds, and food for human use were examined.

Federal Hazardous Substances Labeling Act

The Federal Hazardous Substances Labeling Act requires consumer protection information on labels of hazardous household products such as cleaning agents, paint removers, and polishes. Enforcement of the act began on February 1, 1962. Thirteen products were seized and removed from consumer channels because they were devoid of the labeling required by the act or the regulations. Included were soldering materials (5); turpentine (3); carbon tetrachloride (2); a lacquer; lacquer thinner; and a sanding sealer.

The first seizure made under the new law involved soldering salts, which had been linked to the death of a child. The father, a repairman for electronic equipment, had a workshop in the family kitchen and had transferred soldering salts from the original container to a soda pop bottle. While standing, it had absorbed moisture from the air and had become a clear, sirupy liquid. The child found the innocent looking pop bottle and took a swallow. The corrosive solution burned out the child's esophagus and stomach, and he died despite an emergency operation. The salts as shipped did not bear any warning labeling. The father of the child said that if the product had had such a warning, he would have been more careful with it.

Enforcement of Other Acts

A total of 119,551,434 pounds of tea was examined under the Tea Importation Act, an increase of about 12,000,000 pounds above last year's imports. Rejections amounted to 164,748 pounds for failure to measure up to the standards set by the U.S. Board of Tea Experts. Eight rejections were appealed to the U.S. Board of Tea Appeals, but the decision of the FDA examiner was upheld in all cases.

No actions were taken under the Filled Milk Act. Three permits were issued for importation of milk—two from Canada and one from New Zealand—under the Import Milk Act.

Civil Defense

The civil defense work of FDA, financed by funds appropriated for the Office of Defense Mobilization, centers around radiological, biological, and chemical warfare agents that may contaminate foods and drugs in the event of enemy attack.

The main emphasis has been on training FDA employees; other food and drug officials at Federal, State, and local levels; and industry officials in the recognition and the solving of problems that may arise from enemy use of such agents. Six different courses for these officials were presented in 37 classes attended by 1,530 people. These courses dealt with such matters as the effects of these warfare agents on foods and drugs, monitoring and testing techniques, and methods of decontamination or destruction of contaminated products. The industry course is directed toward problems which must be solved by a particular industry in case of attack.

FDA also conducts research to help deal with the effects of biological warfare agents on foods. Studies were made concerning two such potential agents in staple foods. Although incomplete, they have demonstrated that the relatively fragile *P. tularensis* survived up to 6 months in some food. As expected, *B. anthracis* survived well. Studies of decontamination of six staple food commodities and of the heat stability of *S. aureus enterotoxin* were started.

New Court Interpretations

The 1961 Annual Report discussed a case involving chocolate mints in a package with hollow ends and dividers, charged to be deceptive. At that time the Court of Appeals had remanded the case to the district court with the instruction that deceptive packaging could be justified only by findings that the effectiveness of the package to protect the product outweighs the deceptive quality. The district court again ruled that the candy was not misbranded, and that the usefulness of the package both from the standpoint of protecting the contents

and of economy of manufacture, outweighs its deceptive quality. The Government again appealed to the Court of Appeals for the Third Circuit on the grounds that the decision was contrary to the weight of the evidence. The appellate court upheld the decision of the district court, in an opinion filed in April 1962. This is the fourth contested deceptive packaging case, and the courts have in every instance ruled against the Government. However, the case provides useful guidelines for future cases.

In several seizure cases involving physicians' samples of drugs, the labels of which bore legends such as "professional sample," "Physician sample," and "physician sample not to be sold," district courts have held that such samples in the original containers were not misbranded, even though they were no longer to be used as physicians' samples, but were to be sold to the public on prescription. These decisions are being appealed.

A defendant charged with contempt of an injunction prohibiting claims for treatment for obesity and depression of appetite for a phenylpropanolamine hydrochloride drug preparation defended on the grounds there was no intent to violate the temporary restraining order and preliminary injunction. The court in finding the defendant guilty of contempt held that intent is not an element of the offense in a contempt of injunction under the act.

A judge in the U.S. District Court for Pennsylvania, in a seizure contest involving high mold counts in tomato catsup, reaffirmed a number of earlier decisions that the act does not require a food substance to be unfit or injurious to health in order to be filthy or decomposed within the meaning of the statutory definition.

The Government lost a seizure action involving "Nut Caramels" in which misbranding was charged because the net weight and ingredient statement were printed on the label in a silver color against a noncontrasting background and the only nut ingredient was peanuts which was declared in the allegedly inconspicuous ingredient statement. In its opinion the district court found that the evidence established the net weight and ingredient statements were easily readable by the average person at a distance of 29 inches, and that there was a lack of evidence that the ordinary consumer was misled by the name of the product. The court further remarked that any person allergic to nuts of any kind was put on notice by the word "nut" in the product name which was many times more visible than the word in the ingredient statement.

The author of a book which was seized as labeling along with a stock of vitamins and minerals petitioned to intervene. The Government opposed intervention on the grounds that the action was *in rem* and the author did not own either the books or the product. The district

court ruled in favor of the author holding that FDA's press release gave the action an *in personam* nature.

The Court of Appeals for the Seventh Circuit affirmed a lower court's issue of an injunction prohibiting the interstate disposition of a costly diagnostic and therapeutic device which was of no value. In upholding the allegation of misbranding of the device, the appellate court held that it was dangerous even in the hands of a practitioner because of its worthlessness for any diagnostic or therapeutic use. The case was appealed to the U.S. Supreme Court which denied certiorari.

A district court jury in Texas returned a verdict in favor of the Government in an action intended to restrain an exterminating company from placing a highly toxic rodenticide (1080) near stored food products of interstate origin in a food warehouse in such a way as to make contamination possible. The Government alleged that such careless placement of the rodenticide was an act which resulted in the food becoming adulterated because it may be rendered injurious to health.

Changes in the Law and Regulations

Enactment of the Drug Amendments of 1962 (Public Law 87-781) came after the close of the fiscal year, on October 10, 1962, but various amendments to strengthen the drug law were under active consideration throughout the Second Session of the Eighty-Seventh Congress.

These drug amendments, designed to assure a greater degree of safety, effectiveness, and reliability in prescription drugs, are a milestone in the protection of public health.

Drug manufacturers will be required to conduct their establishments in conformity with good manufacturing practices, using quality controls that will rule out inadequate facilities and poorly trained operators, to assure that drugs have the identity and strength and meet the quality and purity characteristics they are represented or purport to possess.

Firms wishing to market new drugs will be required to establish not only the safety of the drugs but also must produce substantial evidence of their effectiveness in accomplishing the purposes claimed in their labeling. Government approval must be affirmative rather than by failure to disapprove, and 180 days, in contrast to 60 days, are allowed for initial consideration of the application.

Previously cleared new drugs may be ordered off the market immediately if new information indicates an imminent danger to health. And, any prior approval may be withdrawn, after a hearing accorded to the manufacturer, in any case where tests or experience shows the drug unsafe, or new evidence shows that the drug has not been shown to be safe, or will not be effective for its intended uses.

New requirements confer statutory authority on the Secretary to regulate the testing of experimental drugs on humans.

All antibiotics for use by man will be subjected to the batch-by-batch testing previously required for only five antibiotics and their derivatives.

The new law grants FDA more effective factory inspection authority with respect to firms manufacturing prescription drugs and consulting laboratories, and requires biennial inspections of drug factories. It also requires every drug manufacturer to register with FDA once a year.

Other amendments will lead to simpler nonproprietary names for drugs, to appear in type at least half as large as the brand name when it appears on the label and in labeling and advertising. Prescription drug advertisements must also contain a brief summary of information as to adverse side effects of the drug and warnings of when it should not be administered as well as the formula and a statement about conditions for which it is effective.

The new law took effect on approval of the President on October 10, 1962, except for certain requirements to go into effect on May 1, 1963, and transitional provisions for drugs on the market at the time the amendments were enacted.

REGULATIONS

Drugs.—A revision of the labeling regulations effective June 3, 1962, requires packages of prescription drugs and devices to contain adequate information for their professional use, including all relevant information concerning any adverse effects. This "package insert" requirement, following the recent regulation requiring "full disclosure" information in prescription product promotional literature, is part of a program to require manufacturers to make readily available to physicians complete and accurate information on the dangers, as well as the usefulness, of prescription products. The regulation applies to all prescription drugs and devices excepting those for which the uses are commonly known. Lists of drugs entitled to this exemption were published in the Federal Registers of December 29, 1961, and June 8, 1962.

A statement of policy was issued requiring preparations of phenindione, a drug used as an anticoagulant, to bear warning statements on the label and in other labeling to disclose that certain blood disorders, liver damage, and sensitivity reactions have been associated with its use. Drug manufacturers have revised the labeling of these drugs to include the recommended warnings.

A proposal was published to convert anthelmintic drugs containing piperazine from prescription to over-the-counter sale. Comments on

the proposal showed a difference of opinion among medical experts as to the ability of the layman safely to diagnose and treat pinworms and roundworms without medical supervision. In view of these comments, a final order was published on April 18, 1962, denying the petition.

A proposed statement of policy was published on preparations for the treatment of pernicious anemia. Comment was invited on the proposal that would require oral preparations intended for use in pernicious anemia, particularly intrinsic factor with vitamin B₁₂, to be labeled with the caution that the article may not be a reliable substitute for treatment by the injection of vitamin B₁₂ and that periodic examinations and laboratory studies of pernicious anemia patients are essential. The proposal would also limit intrinsic factor preparations to prescription sale as drugs. A final order has not yet issued.

A statement of policy was issued explaining the conditions under which a statement of usual dosage will not be required on prescription drug labels, i.e., when the label does not have sufficient space for an informative dosage statement but the information is contained in a package insert.

The policy statement limiting preparations of potassium permanganate to prescription sale was amended to allow the sale without prescription of certain preparations solely for veterinary use.

During the year, the antibiotic regulations were amended 334 times and 14 new monographs added.

The thalidomide incident focused public attention on the need for strengthened controls over new drugs during investigational trials. On August 10, 1962, new regulations were proposed to keep FDA fully informed of the initiation and progress of clinical studies. Adequate studies on animals and other appropriate preclinical studies to assure safety to humans administered the drug in clinical trials would be required. The manufacturer would also be required to furnish FDA with the names and qualifications of the investigators and to make the reports of such investigators available to FDA on request.

Until October 10, 1962, the first information about new-drug safety studies might have come to FDA with the new-drug application after the studies had been completed. In the case of thalidomide, more than 1,200 investigators had been furnished 2.5 million tablets of the drug for use while safety data were being evaluated by FDA. Affected persons were permitted 60 days for comment on the proposed regulations.

Food Additives.—The past fiscal year saw an increased activity in regulations writing. This was true in all areas of responsibility—human food, animal feed, and packaging materials. Whereas regulations applying to only 60 human food additives were issued in the 1961 fiscal year, more than three times as many additives were made

subjects of regulations in 1962. New regulations involving human foods totaled 33, and 48 amendments were made to the existing regulations. Twelve new animal feed regulations and 22 new amendments were issued in 1962, involving 38 new feed additives.

It was in the area of indirect additives that new regulations provided a significantly large number. Thirty-three new regulations and 19 amendments involved 1,606 additives. Previous to the 1962 fiscal year, 457 indirect additives were covered. The petitions must not only present adequate proof of safety, but also must furnish acceptable analytical procedures for enforcement use.

Legislation was enacted which provided for further extensions of the effective date of the amendment to June 30, 1964. In fiscal 1962, 1,253 indirect additives and 797 direct additives were made subjects of extension orders. Flavors accounted for the majority of the extended additives. One important aspect of current extension orders is the responsibility of the petitioners to furnish progress reports of their investigations.

The subject matter of new regulations involved such diverse products as boiler water additives, modified hop extract, paraformaldehyde to control microbial or fungal growth in maple tree tapholes, fatty acids, sodium lauryl sulfate as an emulsifier, animal glue, surface lubricants on metallic articles, and silicon dioxide in certain animal feeds and feed components.

Color Additives.—The Color Additive Amendments of July 12, 1960, provide for listing of safe color additives. They also provide that for 2½ years after enactment established color additives may be listed provisionally, if consistent with the public health, before a permanent listing is issued. A number of color additives were provisionally listed in 1960. Additions to the provisional list were made in August 1961 and June 1962. D & C Orange Nos. 3 and 4 were added to the provisionally listed lipstick colors, and D & C Red No. 12 was added to the colors provisionally listed for drug use. A number of vegetable colors for foods were also added to the provisional list.

Four petitions for permanent listing were received in 1962, of which three—D & C Green No. 6 to color polyethylene terephthalate sutures, iron oxides to color drugs, and annatto extracts to color foods and drugs—were filed, but regulations have not yet issued.

The Food and Drug Administration continued its study of the toxicity of the FD&C colors now being certified. Various studies by industry groups were planned or underway for a number of the colors formerly listed under the coal-tar color provisions of the law and for some inorganic pigments and vegetable colors.

Pesticides.—One hundred fifty-nine pesticide tolerances or exemptions were established for raw agricultural commodities involving 27 pesticide chemicals; 5 of these had no previous tolerances.

Eighty-five inert ingredients used in pesticide formulations (from a list of several hundred) were exempted from the requirement of a tolerance when used in accordance with good agricultural practice. Forty-three temporary tolerances were established for raw agricultural commodities, involving 7 different pesticide chemicals, to permit marketing of crops experimentally treated with pesticides in accordance with permits granted by the U.S. Department of Agriculture.

On June 30, 1962, there were 2,450 tolerances or exemptions and 8 declarations of general recognition of safety on a total of 127 pesticide chemicals in addition to exemptions for the 85 inert ingredients of pesticide formulations used in the production of food crops. Six petitions for pesticide tolerances were denied filing because of inadequacies.

Food Standards.—A number of food standards actions were concerned with identity standards for various cheeses. A tentative order embodying findings of fact based on the record of the hearing on mozzarella, scamorza, and related cheeses was published.

The standards for swiss cheese and the American-type cheeses—cheddar, colby, washed curd, and granular—were amended to provide for the making of these cheeses from milk treated with limited amounts of hydrogen peroxide and catalase. Amendments were made of the standards of swiss cheese and the Italian-type cheeses—provolone, caciocavallo siciliano, romano, and asiago—to permit them to be made from milk bleached with benzoyl peroxide and to prescribe a label statement showing the cheese to have been made from bleached milk. The standards for blue cheese and gorgonzola cheese, which since 1950 have permitted bleaching with benzoyl peroxide, were amended to require label declaration.

A standard for muenster cheese for manufacturing was promulgated, and the standards for 10 processed cheese products were amended to permit muenster cheese for manufacturing to be used in the processed products. The standard for cream cheese was amended to add guar gum to the optional vegetable gums permitted, and proposed amendments of the standards for cottage cheese and creamed cottage cheese were published.

A standard of identity for peanut butter was published, but objections were filed requiring the order to be stayed until a public hearing is held.

The bread standards were amended to provide for the use of L-cysteine and for hydroxylated lecithin to facilitate processing in the bakery. The standard applicable to enriched self-rising cornmeal was amended to increase the level permitted for calcium. New standards were established for enriched vegetable macaroni and noodle products.

Also, a new standard was set for artificially sweetened canned pineapple. The standard for evaporated milk was amended to permit the adding of small amounts of carrageenan or salts of carrageenan to improve its stability. The ice cream standard was amended to change from 1.5 to 2.5 the factor used in allowing for sugar in chocolate-flavored ice cream.

A manufacturer who proposed to make a powdered fish product by grinding up whole fish, including heads, tails, fins, entrails, and intestinal contents, was told informally by FDA that the law prohibits such a product because of the incorporation of filth in the food. The manufacturer sent in a proposed standard for whole fish flour and it was published for comment. Following receipt of some 2,000 letters concurring in FDA's view that consumers generally would regard the whole fish product as filthy, an order was issued for fish flour made from cleaned fish only. The proponents of whole fish flour demanded a public hearing and a date was set for it. The proponents later requested a postponement to get more evidence that whole fish flour is, in fact, safe for use.

Hazardous Substances.—The Federal Hazardous Substances Labeling Act was enacted in July 1960 and all its provisions became fully effective on February 1, 1962.

Because the affected industries could not meet all the requirements of the final regulations pertaining to the placement and conspicuousness of the warning statements by that date, the effective date for these requirements was extended to August 1, 1962, and further extended to February 1, 1963.

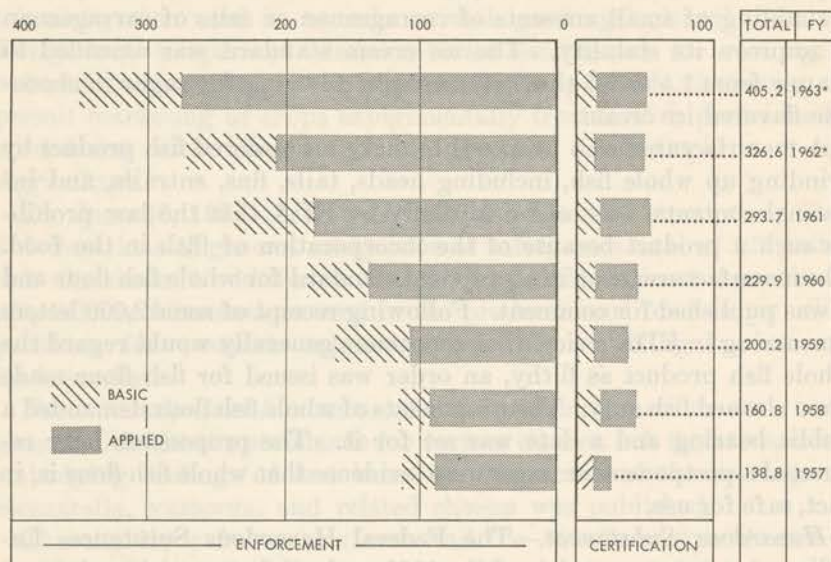
Administration of this law provides for exemptions from the labeling required by it. The Commissioner has received over 100 requests to exempt certain products from such requirements. Forty-six requests have been granted, and the exemptions were published in the Federal Register. Twenty-six of the requests have been denied because they were not in the interest of the public safety.

Scientific Investigations

A vigorous, well-organized program of scientific investigation is indispensable to FDA's enforcement activities. The domain of the regulated industries is scientifically complex, and it is expanding at an accelerated pace. In the course of this expansion, scientific problems involved in law enforcement have become increasingly complicated. The function of research in FDA is to provide the scientific information and techniques which are needed for the intelligent, effective administration of the law.

Scientific investigations are performed in both the field and headquarters laboratories. Responsibility for conceiving, designing, de-

Chart 5.—TIME (IN MAN-YEARS) SPENT ON FDA RESEARCH FOR ENFORCEMENT AND CERTIFICATION, FISCAL YEARS 1957–63



*Based on estimated reports

veloping, and executing research studies is assigned primarily to the seven scientific divisions comprising the Bureau of Biological and Physical Sciences. These divisions are furnished with professional staffs and scientific instruments necessary for conducting research in chemistry, radiochemistry, biochemistry, bacteriology, analytical microscopy, pharmacology, and related disciplines.

One of the most significant achievements of modern technology has been the discovery of powerful new chemicals which are valuable as drugs, food additives, or pesticides. However, misuse of these biologically potent substances may contaminate food and drug products, and thus endanger the health of the public. In devising sensitive, specific analytical methods to determine such contaminants in low concentrations, FDA research protects the consumer in two ways. It affords a means to detect contaminated products by reliable tests, so that they may be removed from commerce. It also provides the manufacturer with a control procedure whereby he can check the integrity of his product, rejecting those which he finds contaminated.

During the past year, a drug product for the treatment of tuberculosis was shown to be adulterated with traces of diethylstilbestrol. The quantities of this potent estrogen in the product were about one-millionth of an ounce per tablet. But this minute concentration was sufficient to cause symptoms of sexual precocity in the infant girls treated with the antitubercular drug.

Inspection of the plant where the drug originated revealed that the manufacturer neglected to clean his machinery after processing high potency products. By means of specially designed ultraviolet irradiation tests, FDA examined a series of products fabricated immediately after diethylstilbestrol preparations. Many of them were contaminated with significant proportions of diethylstilbestrol. A similar set of drugs following penicillin products in the manufacturing schedule were found to be adulterated with this antibiotic. Other products from the same manufacturing plant and the products of other laboratories are being examined systematically by appropriate analytical methods, devised as needed, for evidence of such cross-contamination by dangerous drug substances.

Antibiotics, in addition to their well-known clinical uses, are widely used in drugs for the treatment of mastitis, and in animal feeds. After the infusion of mastitis preparations into the udder, the milk of the diseased cows is discarded until the fluid is free of antibiotics. Even in low concentrations, antibiotics may be toxic to sensitive individuals. A study of several mastitis preparations administered to cows disclosed that three of the drugs caused persistence of penicillin in the milk beyond the prescribed withholding period. Certification of these products has been suspended. Similar investigations are in progress to determine whether the use of antibiotics in chicken feeds leads to residues of the drugs in eggs.

New instrumental techniques have proved invaluable for the identification, detection, and determination of pesticides and food additive residues. A special extraction cell devised in FDA laboratories measures the potential concentrations of food additive substances extractable from packaging materials. Spectrophotofluorometric and phosphorimetric techniques are being developed for the determination of polynuclear hydrocarbons in petroleum products. The newly constructed "electron capture" detector for the gas chromatograph is sensitive to a nanogram (one-thousandth of a millionth of a gram) of the common chlorinated pesticides. It can be adapted also for the measurement of organo-phosphate pesticides and other trace contaminants in food. The utility of microcoulometric gas chromatography for the analysis of chlorinated pesticides has been established.

Gas chromatography seems to have unlimited potentialities for the solution of analytical problems in the field of food adulteration. The adulteration of butter with small quantities of vegetable oil or the substitution of cheaper oils for peanut oil can be demonstrated clearly by means of gas chromatography. Adulteration of cottonseed oil with soybean oil also can be detected by this means. It may even be possible to differentiate between refined olive oil and the material extracted by solvents from olive pits and pomace.

Other researches employing gas chromatography have been initiated for the study of food constituents. Volatile amines and fatty acids which are characteristic components of decomposed foods can be separated and identified in the gas chromatograph. The chick edema factors may be isolated and measured by a combination of chromatographic techniques which are being incorporated into a physiochemical method for detecting these toxic substances. Related studies in industry laboratories and FDA indicate that the chick edema factors which caused large losses of birds in the broiler industry are chlorinated aromatic substances. Their origin and their pathway into chicken feeds are still under investigation.

Column chromatographic procedures have been employed for the determination of synthetic organic colors in foods. Even bakery goods, which form an intractable combination with many dyes, can be analyzed by the newly devised procedure. The food is ground to a paste with water, and mixed with a porous bulking material. The entire mass is then packed into a suitable tube. Organic solvents containing selective resins are percolated through the mass to strip the color from the food particles, and the fluid emerging from the bottom of the tube contains the dyes. By the use of appropriate resins and solvents many of the stable synthetic dyes can be recovered almost quantitatively from foods.

The tendency of organic dyes to decompose in a variety of physical and biological systems has been investigated, and the toxicity of some of the products has been measured by long-term feeding experiments. Studies on the metabolites of FD&C Red No. 1 and related azo dyes indicate that bases oxidized to aminobenzoic acid derivatives may be toxic dye constituents.

Similar long-term pharmacological investigations have been conducted for various flavoring substances and for pesticides. There is a need for analytical procedures which yield reliable toxicity data more rapidly than the classical methods of pharmacology. Two promising approaches to such procedures are the injection of chemicals into chick embryos and the tissue culture technique.

In the chick embryo procedure, chemicals are injected directly into the yolk sac of fertile eggs, and the treated eggs are incubated together with untreated eggs as controls. Toxicity is then measured by: (1) interference with embryonic development; (2) percentage of hatch; and (3) secondary effects after hatching, such as weight retardation or abnormal tissue development. In the tissue culture technique, toxicity is indicated by the deleterious influence of the chemical when introduced into the environment of cell cultures derived from liver, kidney, or other tissues. Certain arsenicals and alcohols have proved as toxic when tested by these rapid methods as in the long-term studies.

A luminescent micro-organism has been employed as a biological indicator to detect minute quantities of radioactivity. Standardized colonies of the luminescent organism are cultured, and their production of light energy is measured. Ionizing radiation emitted by radioactive isotopes damages the organism, resulting in diminished light output. Accurate systems have been devised to measure the light emitted. Correlation of quenching effects with known concentrations of radioactive isotopes would indicate that this microbiological method is reliable.

Research on the toxin responsible for staphylococcus food poisoning has progressed. Media for the production of the enterotoxin as well as analytical methods have been improved to such an extent that pure toxic staphylococcus cultures can be detected without preliminary concentration. Enterotoxin A (the new designation of the food poisoning type) is being purified in order that extremely sensitive serological techniques may be applied to the detection of trace amounts of enterotoxin in foods. These findings will be employed in studying the staphylococcal types isolated from over 3,000 samples of raw milk collected throughout the country.

A new investigation on toxic molds has been undertaken, following reports this year from England that peanuts infested with *Aspergillus flavus* had proved fatal to turkeys and ducklings. Toxic strains of this mold have been obtained, and have been cultured to produce material for chemical and biological studies. Peanut products and grains will be examined systematically afterwards for the occurrence of toxic *Aspergillus flavus* contamination.

Research continues on the adverse nutritional effects of overheated fats. Among the side products obtained when fats are continually heated is a group of unnatural fatty acids consisting of branched and ring compounds, dimers, and polymers in contrast to the normal monomer linear chain compounds. On feeding these substances to test animals, it has been clearly demonstrated that fatty materials containing branched and ring compounds or dimers are low in nutritive values and lead to retarded growth. In high concentrations these abnormal fatty acids are markedly toxic to rats.

A new investigation on nutritionally important trace elements is studying the transfer of minerals across cell membranes and the role of enzymes in this process. Since the concentrations of these elements in the body tissues are extremely low, sensitive methods of analysis are required. Neutron activation techniques have been considered for this purpose. In this technique the element sought is rendered radioactive by neutron bombardment, and the resulting isotope is measured by means of radioactivity counters.

The availability to the body of vitamins or other nutritional ingredients administered as drugs is a recurrent problem. It has been stated that some tablets which contain the proper quantities of the labeled active ingredients may not release the substances to the organism because the tablet does not disintegrate, or for other reasons. Studies have shown that several vitamin tablets which did not appear to disintegrate, nevertheless released the vitamin to test animals. Similar observations have been reported for other drug preparations. It is apparent that the accepted tests for tablet disintegration will require modification.

Application of new techniques to the analysis of pharmaceutical preparations has revealed that some compounds previously thought to be pure may be materially contaminated with closely related substances. The presence of foreign steroids in adrenocorticoids and of ergotamine in ergotamine are two examples of significant impurities detected by paper chromatography. The initial phase of an investigation to study the purity of pharmaceuticals concentrated on compounds whose synthesis favors the formation of isomers.

A project to record the infrared, ultraviolet, and visible spectra of Reference Standard drugs has been completed. These spectra will be published soon as an aid in the regulatory identification of drugs. Spectra of other drug substances of significance to enforcement work also will be measured.

In addition to these and many other scientific investigations in the Bureau of Biological and Physical Sciences, research was conducted to devise analytical methods utilizing new instrumental techniques and improved biological procedures.

Hospitals reporting to the Bureau of Medicine on adverse drug reactions increased from 35 to 44 during the year. They submitted 2,745 reports of which more than 700 were considered significant enough to be reported in considerable detail. The value of these case reports is increasingly evident. Some have led to labeling changes to prevent recurrences of adverse reactions.

Enforcement Statistics

The year's activities included 43,913 inspections of factories, warehouses, and pesticide practices; 4,150 of public eating places to check on the notification of the serving of oleomargarine; 117 inspections involving illegal sales of prescription drugs; and 99 of spieler and lecture activities. Of 62,712 domestic samples collected, 43,047 were foods, 16,954 drugs and devices, 480 cosmetics, 1,356 color additives, 835 hazardous household substances, and 40 miscellaneous.

In the 274 criminal actions terminated (or terminated for some defendants) in the Federal courts during 1962, fines assessed totaled \$280,502. One case was dismissed because the firm had gone out of business. Jail sentences ranging from 1 day to 6 years were imposed in 47 cases involving 55 defendants. Twenty-four individuals were required to serve imposed sentences, averaging 9 months; sentences were suspended for 31 on condition that violative practices be discontinued. The highest combined fine of the year was \$20,000 imposed on a distributor of "health foods" and two officers of the firm. Records of actions terminated in the courts were published in 903 notices of judgment.

Table 2.—Number of samples on which criminal prosecutions and seizures were based and number of court actions instituted during the fiscal year 1962

Item	Total		Criminal prosecutions instituted		Seizures accomplished		Injunctions requested
	Violative samples	Actions	Violative samples ¹	Actions	Violative samples	Actions	
Total.....	4,063	1,612	1,661	314	2,402	1,273	25
Foods.....	1,794	997	492	117	1,302	867	13
Drugs and devices.....	2,211	583	1,169	197	1,042	374	12
Cosmetics (colors).....	38	19			38	19	
Hazardous household substances.....	20	13			20	13	

¹ The number of samples on which the actions are based always exceeds the number of actions; in seizures a variety of articles may be contained in a single shipment, while in criminal actions each sample usually represents a single shipment which forms one count of action.

Table 3.—Import samples collected, examinations made, and lots detained during the fiscal year 1962

Item	Samples collected	Examinations made	Lots detained
Total.....	14,541	21,810	6,588
Foods.....	11,266	20,462	3,286
Drugs and devices.....	3,050	1,054	3,194
Cosmetics, colors, miscellaneous.....	225	294	108

Conclusion

This report records what the Food and Drug Administration has been doing to protect consumers in an ever-changing environment over which they have little control. The highlights, listed at the beginning of the report, show progress in both health and economic protection. But the coverage is still inadequate to appraise and act on all of the problems existing in food, drug, device, and cosmetic areas.

The consumer is receiving increased recognition and will receive

added protection in the year to come through new tools to meet the ever-growing responsibilities of the Food and Drug Administration—more staff, better facilities, and new laws aimed at making drugs safer and more effective.

Studies are continuously being made to assure the most efficient use of these tools. Recommendations of the Second Citizens Advisory Committee to this end have been under consideration since they were received late in October 1962.

Office of Vocational Rehabilitation

MORE THAN 100,000 disabled persons were rehabilitated successfully to productive employment in 1962 through the public program of vocational rehabilitation. The total—102,377—was the largest ever reached in 1 year in the 42-year-old State and Federal partnership in rehabilitation and was 11 percent greater than the previous year and about 85 percent more than in 1954, the year in which new Federal legislation gave the public program renewed incentives and a sound basis for expansion.

The public program of rehabilitation is built around the vocational rehabilitation agencies in each of the States, the District of Columbia, Puerto Rico, Guam, and the Virgin Islands. In 36 of these jurisdictions there are, in addition to general rehabilitation agencies, separate agencies that provide rehabilitation services for blind persons.

All the State agencies are joined in a partnership with the Federal Government through the Office of Vocational Rehabilitation, which provides national leadership for the program and administers several systems of grants for various rehabilitation purposes.

The 90 State agencies—which provide the actual rehabilitation services—reported to the Office of Vocational Rehabilitation at the end of the 1962 fiscal period¹ a total of 102,377 disabled persons rehabilitated during the year.

It was a significant figure in several respects.

Halfway to a Long-Time Goal

The year's work had great importance to those who, in the nature of their interests and responsibilities in the public program, have especial concern for its progress on a nationwide basis.

For, in passing the 100,000 mark, the public rehabilitation effort has

¹ Unless otherwise indicated, all subsequent references to 1962 will be to the fiscal year, that is, to the period between July 1, 1961, and June 30, 1962.

climbed halfway to a national goal that was set with the enactment of the 1954 legislation.

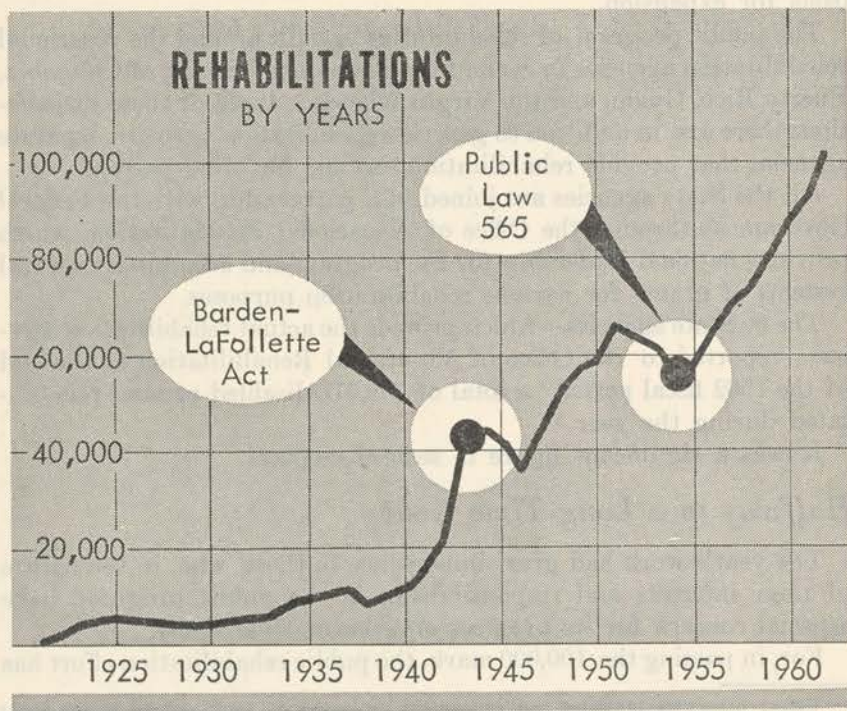
The year's work also brought recognition from the President, who, for the first time, announced the results and assured the country that "we are making a determined national effort" to reach the 200,000 mark in numbers of people rehabilitated annually.

As well as can be estimated, there are more than 2.5 million disabled persons in the United States who could benefit from services available through their State vocational rehabilitation agencies. Moreover, an estimated 207,000 or more persons come to need rehabilitation services each year from disabilities arising out of disease, injuries, or congenital conditions.

The Steady Climb Since 1954

The climb of the public program toward its 1962 achievement is shown in chart 1. The first ascent began with the entrance of the United States into World War II. In 1943, manpower shortages dic-

CHART 1.—REHABILITATIONS BY YEARS



tated a necessity for bringing more disabled persons into the war effort, and the Barden-LaFollette Act provided a liberalization of services for the disabled, gave the Federal Government greater financial participation in State programs, made specific reference to vocational rehabilitation of the blind, and, for the first time, made persons with mental handicaps eligible for rehabilitation services for which the Federal Government paid part of the cost.

After a swift climb during the war years the inevitable readjustments of the postwar period brought a short decline in the totals of rehabilitated people, and a reassessment of the program was undertaken to smooth the transition from the emergency manpower requirements to the longer-range objectives of peacetime. But a new philosophy of rehabilitation was gaining ground, and there was widespread feeling that the State-Federal partnership needed a new legal base to support some new concepts.

In 1954, enactment of Public Law 565 gave the program a fresh start on a basis suited more to the needs that were outlined to the Congress in lengthy hearings. A new system of Federal grants to States was inaugurated in support of their basic rehabilitation activities. Authorization was given for Federal support of research and demonstration projects in rehabilitation, as well as for support of projects in educational institutions throughout the country that could offer instruction in several disciplines required for a new concept of the public program.

The framework that was built under the new law had several direct consequences. Substantial increases were successively recorded in the number of persons rehabilitated into successful employment; there was elevation in the quality of services; and the public program was greatly broadened in scope and direction. All these effects were highly apparent in 1962.

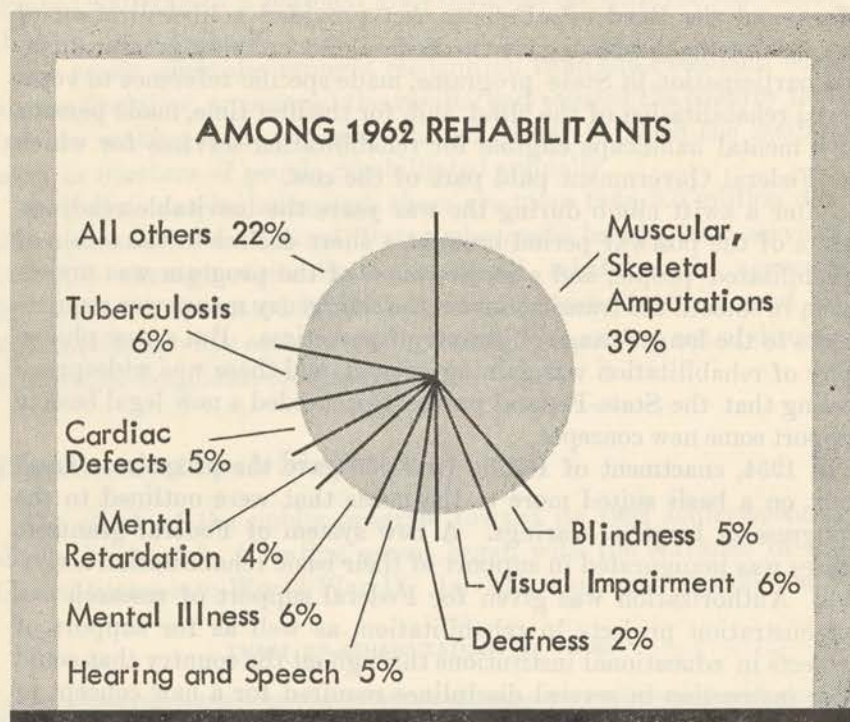
For several years there has been a fairly consistent pattern in many of the statistics of the program.

The principal causes of disability among those who were rehabilitated in 1962, for instance, were orthopedic troubles—amputations, limb impairments, muscular and skeletal difficulties—accounting for 39 percent of the total. This figure has hovered around 40 percent for several years, and before the past few years generally was well above 50 percent.

As can be seen on chart 2, the disabilities of blindness and impaired vision were 11 percent of the 1962 rehabilitants; deafness, impaired hearing, and speech difficulties ran 7 percent; mental troubles, 10 percent, and others as shown.

There were also some small changes in the numbers who entered several broad categories of employment after their services were com-

CHART 2.—PRINCIPAL CAUSES OF DISABILITY AMONG 1962 REHABILITANTS



pleted. As can be seen from chart 3, those who became skilled and semiskilled workers were 26 percent of the total; unskilled workers were 6 percent; clerical and sales people, 16 percent. All these were down slightly from the previous year. Those who entered the service trades, or became family workers, or professional or managerial workers were up slightly. Agricultural workers remained at the same level.

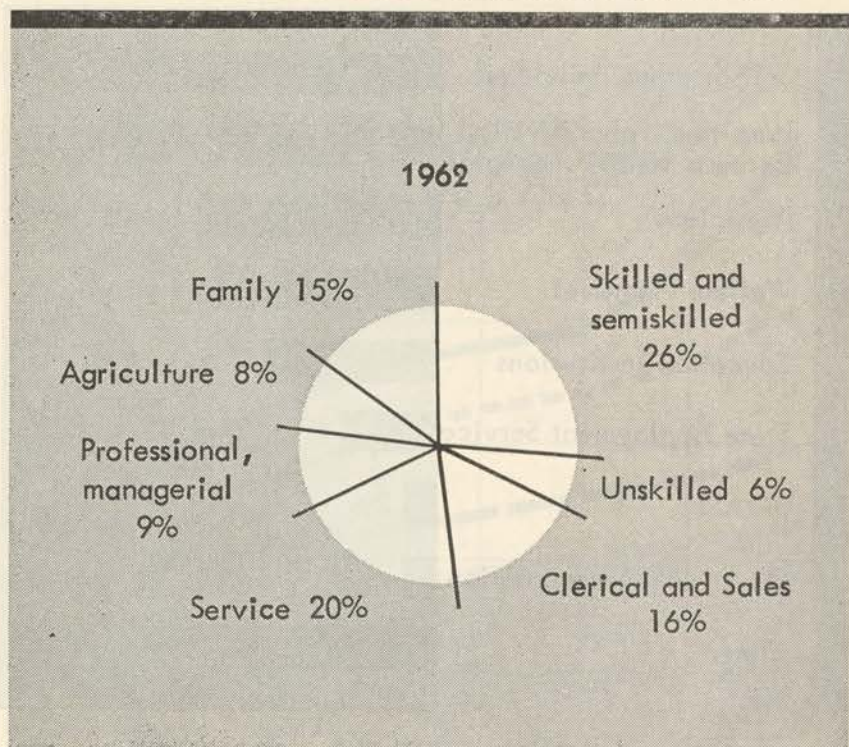
Too, the economic value of the program to the Nation increased in proportion to the high level of activity that set the new record in rehabilitated persons in 1962.

For instance, some 74,000 of those rehabilitated in 1962 were unemployed when they began to receive rehabilitation services. Those who had been working at the time they were accepted for services were earning at a rate estimated to be about \$44 million a year, and generally they were in unsuitable or part-time work.

The entire group is estimated to earn, in its first full year of employment after rehabilitation, at the rate of \$211 million, or 5 times the group's income rate when their services began.

Another measurement of the economic value of the public program is in the number of persons who were removed from public assistance rolls through their rehabilitation into employment.

CHART 3.—MAJOR OCCUPATIONS OF REHABILITATED PERSONS IN 1962



About 18,000 of those who were rehabilitated in 1962 were receiving public support at some time during the course of their service. Their support was at an estimated rate of \$18 million a year. The conversion of these persons from tax consumers to productive citizens cost about \$18 million in a one-time outlay, thus saving many millions of dollars in Federal and State assistance funds.

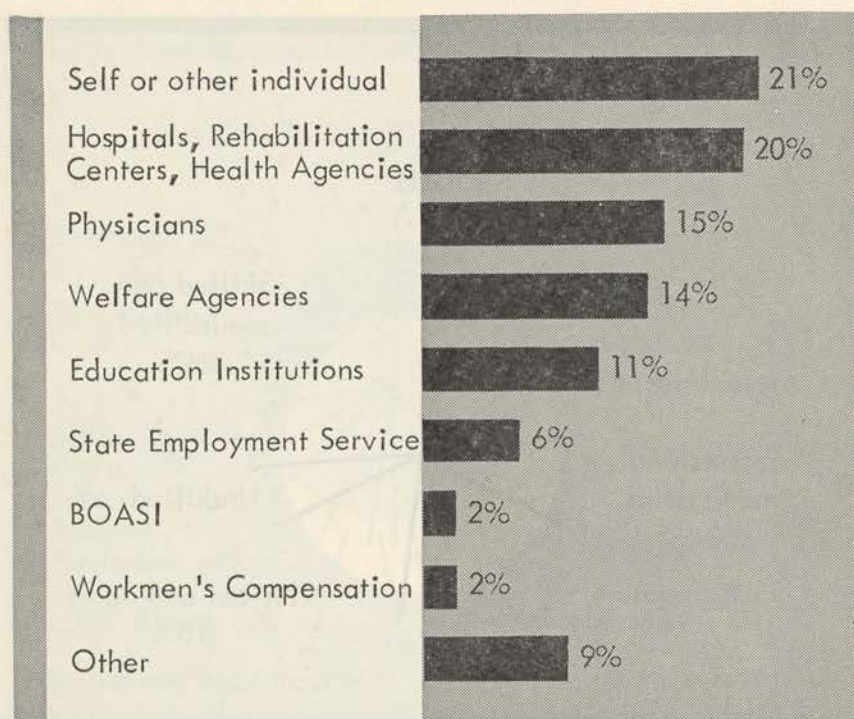
A third way of looking at the national aspects of vocational rehabilitation is in the payments that persons who were rehabilitated into employment in 1962 are estimated to make to the Federal Government in income taxes during the remainder of their working lives.

For every Federal dollar that was expended for their rehabilitation these persons will pay an estimated minimum of \$7—and perhaps more—in Federal income taxes, in addition to taxes they pay to State and local jurisdictions.

Seeking Out the Disabled

One of the more beneficial factors in the 1954 legislation was the mandate it gave to those working in and for the program to dis-

CHART 4.—SOURCES OF REFERRALS OF 1962 REHABILITANTS



seminate information about the availability of rehabilitation services and to encourage and persuade disabled persons to make use of them.

As the program has become more widely known over the country in the past half dozen years, the sources of referrals of disabled persons to State rehabilitation agencies have become wider and more varied.

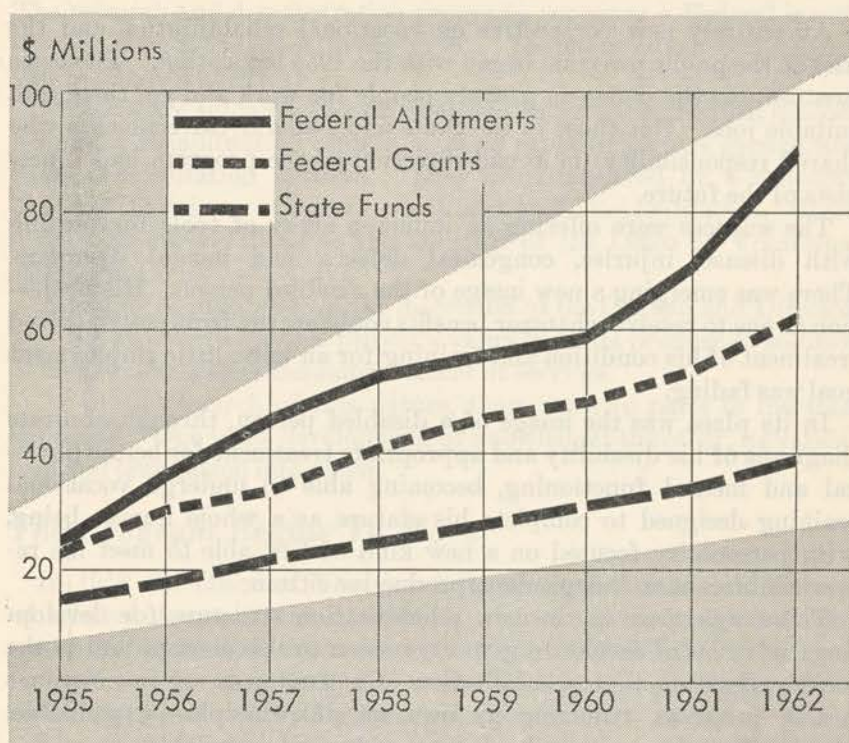
Self-referrals and those coming from families and friends are the most numerous. Not far behind is the number coming from hospitals, rehabilitation centers, and health agencies, followed by the considerable volume from physicians and welfare agencies. Other sources are shown in chart 4.

The Growing Funds for State Programs

The fiscal foundation under the State-Federal partnership in rehabilitation is in several parts. The largest section is that of Federal grants to the States in support of their basic programs of services to disabled people.

The mechanics of the fiscal arrangements include a statutory allotment formula which takes into account a State's population, per capita income, and other factors. The allotments are matched by the States at rates related to their per capita income. The amount of its

CHART 5.—FUNDS FOR STATE VOCATIONAL REHABILITATION PROGRAMS



allotment which a State receives is conditioned upon the amount of matching funds it makes available. Nationally, this proportion works out to about three Federal dollars for every two State dollars.

The amounts made available for the Federal allotments have grown substantially, as shown in chart 5. In the past 2 years the climb has been especially rapid, with a top of \$90 million in 1962.

The chart reveals, too, that the total of Federal funds actually granted to the States from their allotments has also risen but not nearly as sharply as it could have, had the States made more of their own funds available. The actual total of Federal grants made to States in 1962 for basic support of their program was \$62.95 million, matched by a total of about \$39.5 million in State money.

Nevertheless, some States have excellent records in obtaining their full Federal allotments. In 1962, Arkansas, Delaware, Georgia, New York, Pennsylvania, Rhode Island, and West Virginia, as well as the District of Columbia and Guam, obtained 100 percent of their allotments. Kentucky, Massachusetts, and Nevada were in the 90-to-100 percent range. Although the rest obtained smaller amounts there have been impressive increases in almost all the States.

A New Look at Rehabilitation

An entirely new perspective on vocational rehabilitation and the uses of the public program began with the 1954 legislation. The basic premise was the same—to prepare people for work and get them into suitable jobs. But those in the State and Federal Governments who shared responsibility for broad direction of the program had a new vista of the future.

The sciences were offering an immense array of tools for dealing with disease, injuries, congenital defects, and mental disorders. There was emerging a new image of the disabled person. His projection as one to receive whatever benefits could accrue from standardized treatment of his condition and training for an unrealistic employment goal was fading.

In its place was the image of a disabled person, through accurate diagnosis of his disability and appropriate treatment for better physical and mental functioning, becoming able to undergo vocational training designed to complete his stature as a whole human being, with personality focused on a new kind of life, able to meet his responsibilities as an independent, productive citizen.

There was space in the new rehabilitation structure for development of areas of service to give expression to this concept and to the hard realization that rehabilitation is a fixed part of the Nation's health program, requiring its own set of principles—expandable, highly adaptable to individual cases, and widely available.

With this kind of thought, rehabilitation was being prepared to become a science in itself, requiring its own specialized techniques and processes and broader areas of services that were almost unthought-of before the 1954 legislation made them possible.

Research—Window on Progress

The new image evoked more widely and more intensively psychologist and psychiatrist, social worker, vocational specialist, and practitioners of physical and occupational therapies to treat and condition and equip the disabled person to meet the obligations of full citizenship.

Those who framed and enacted the 1954 legislation recognized the coming responsibilities of a revitalized program and provided a way to meet many of them in a system of grants for research and demonstration so that rehabilitation would keep pace with the times.

The Mechanics of Research

Almost 600 research or demonstration projects have been completed, are in being, or are approved for operation since the 1954 legislation

provided the authority and means. Some 200 have been finished. The research and demonstration programs represent a Federal investment of some \$36 million through 1962. The sharp advance in Federal funds is shown in chart 6.

Projects are submitted by colleges and universities, medical schools, hospitals, rehabilitation centers, a broad range of private groups, and State rehabilitation agencies. They are considered by a statutory National Advisory Council on Vocational Rehabilitation, which makes recommendations to the Director of the Office of Vocational Rehabilitation.

Amounts of grants are in the discretion of the Council and Director, and the basic criteria of a project's value lie in its promise of solution of common problems and improvement of services.

As in all research of this nature, there are two parts to the total endeavor. One is the development of knowledge; the other, its validation and translation into action.

The Program Begins To Move

In 1958 the Office of Vocational Rehabilitation launched a series of selected demonstrations to put to use new knowledge gained from research into some of the more severe forms of disability. Priority of support was given for projects in which the knowledge and practices could be applied on a broad geographical basis.

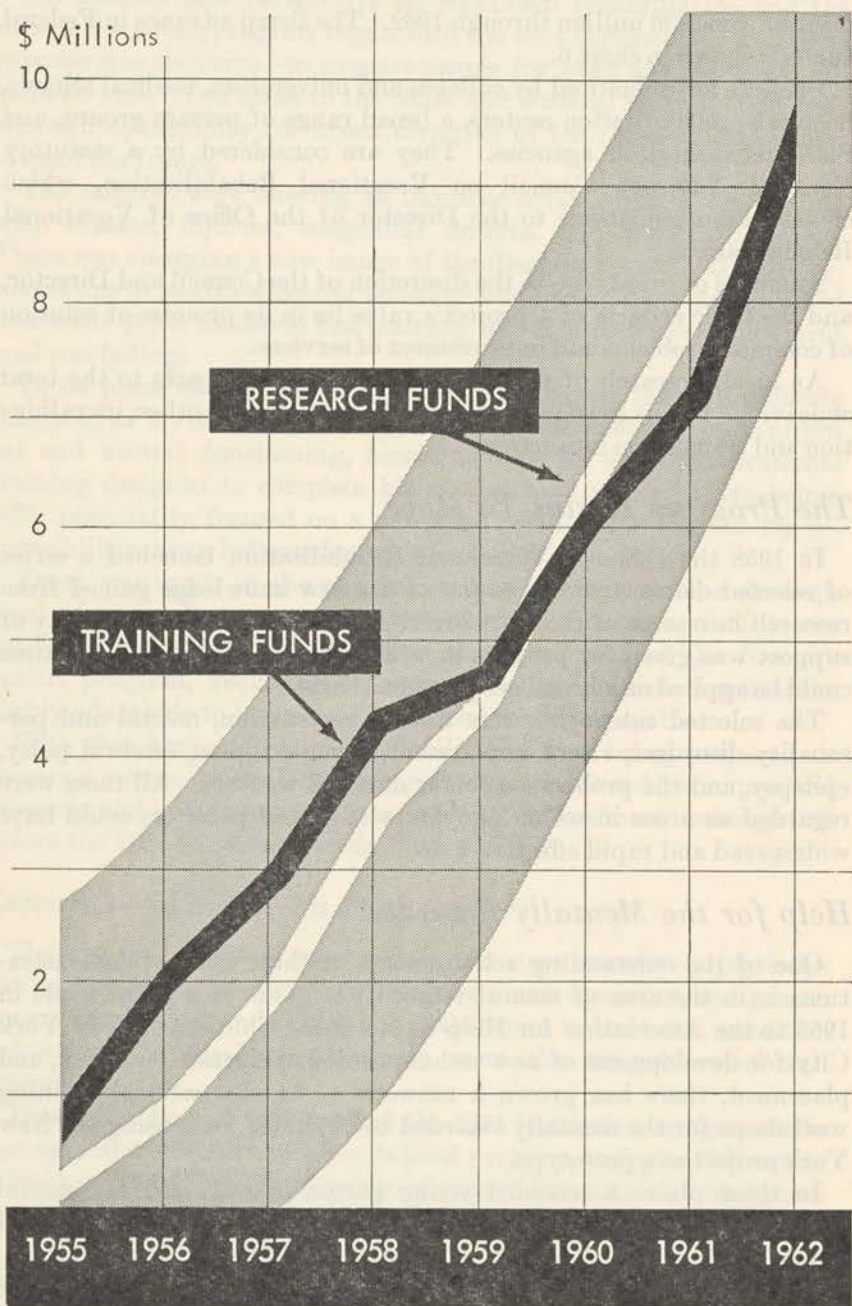
The selected categories were mental retardation, mental and personality disorders, visual impairment, chronic illness, cerebral palsy, epilepsy, and the problems of older disabled workers. All these were regarded as areas in which new knowledge and practices could have widespread and rapid effect.

Help for the Mentally Retarded

One of the outstanding achievements of these selected demonstrations is in the area of mental retardation. Out of a grant made in 1955 to the Association for Help of Retarded Children in New York City for development of new techniques for evaluation, training, and placement, there has grown a network of 34 occupational training workshops for the mentally retarded in 27 States, each using the New York project as a prototype.

In these places a retarded young person is evaluated for mental capacity, ability to adjust to direction and to work situations, and related factors. If there are positive answers, then training is provided for a suitable employment. Scores of retarded young people have been evaluated and trained in these centers and have found work—many in competitive jobs, others in sheltered employment.

CHART 6.—FEDERAL FUNDS EXPENDED FOR RESEARCH AND TRAINING IN VOCATIONAL REHABILITATION



The training encompasses such elementary steps as learning to make change, use a phone, travel by bus to and from work, and eventually proceeds to the teaching of a skill—usually in a repetitive process.

Results in these centers have shown that there can be substantial help for the retarded. The public attitude is changing rapidly, and new points of attack are being developed.

One of them is designed to close the gaps that often occur in the lives of mentally retarded youths as they enter the period where educational and vocational processes begin to merge. This endeavor involves interaction between the State rehabilitation agencies and the educational system, and it is growing rapidly.

There are excellent examples in places such as Georgia, whose Division of Vocational Rehabilitation has a demonstration project in operation to assist the State's secondary schools in coordinating educational, rehabilitation, and community resources, so that the skills of retarded children can be developed and a degree of maturity attained prior to entrance into the labor market. The Minneapolis school systems and the Jewish Vocational Service of Milwaukee have projects to demonstrate the practicality of integrating academic courses with job experience for retarded youths in their last year of high school. Detroit's school system is demonstrating an intensive coordination of school facilities with vocational rehabilitation resources to meet problems of handicapped youths with emphasis on those who are mentally retarded. And on the college level, the Universities of Alabama and Colorado are developing similar systems for use in local school systems to train both educable youths and those whose capacity is below that level.

There are research projects in various phases of rehabilitating the mentally retarded. They include such studies as investigation of job factors, personal characteristics, and educational experience of adult retardates in relation to their vocational and social adjustment; a study of employer, parental, and retarded adult attitudes toward employability; and similar projects to increase the volume of knowledge about retardation.

By such means the public program is being prepared to take an even greater part in meeting the vocational problems among the estimated 5 million mildly retarded children, adolescents, and adults in our society.

They present a host of problems—to themselves, their families, and their communities. The modern approach is to the whole life cycle, from pregnancy onward. In that segment relating to vocational preparation and employment for the retarded the public program will continue to have an important part.

More Aid for the Mentally Ill

Since 1943, when the Barden-LaFollette Act provided authority for mental illness to be included as a disability within the range of the public program of vocational rehabilitation, the State rehabilitation agencies have made substantial moves toward helping mentally ill persons to regain normal lives.

The effort was helped greatly by the funds and the new opportunities to expand services for the mentally ill that came with the new legislation in 1954.

There was authority under the new law for State rehabilitation agencies to extend and improve their services and facilities, with the Federal Government providing 75 percent of the cost of approved projects. Such projects have a maximum duration of 3 years on this basis, after which the States are expected to absorb them into their regular programs.

Through 1962 there have been 58 such projects involving the mentally ill. Some are for establishment of rehabilitation units in State mental hospitals or for adding trained staff so as to emphasize psychiatric rehabilitation, and others are for creating "halfway houses," to help discharged mental patients to adjust to community life.

Since 1956, when the program for the mentally ill began to pick up speed, some 35,500 such persons have been rehabilitated into employment. About 8,850 of this number were in the 1962 total of rehabilitations, an increase of about 28 percent over the previous year.

About \$3 million of the total of \$36 million in Federal funds invested in the rehabilitation research program has been awarded for 54 projects concerned with rehabilitation of the mentally ill, probing into new ways of evaluating, training, and placing persons who have been emotionally disturbed in employment.

Better Sight for Better Jobs

Demonstration projects in rehabilitation work for those with impaired vision take a most practical course. In 19 places in 18 States there are optical aids clinics, where persons with low visual acuity may be fitted with devices that increase their visual perception to the point where they have better opportunities for jobs.

Five of the clinics are in universities, eight are in hospitals, five in agencies for the blind, and one is in a State rehabilitation agency. Most of the clinics operate 1 day a week, and most of them have a social worker and a counselor experienced in the problems occasioned by visual loss.

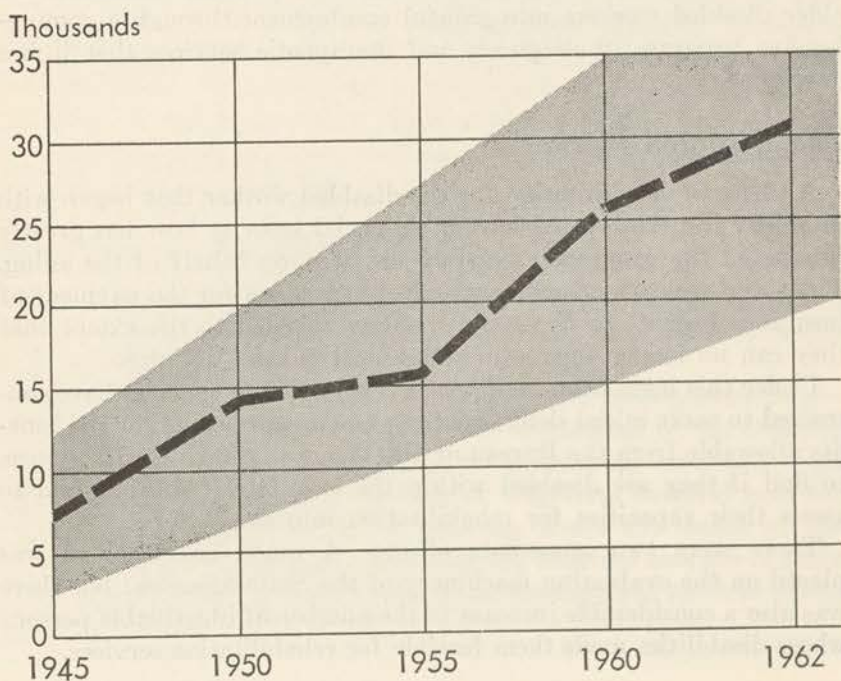
The Rehabilitation Complexities of Older Persons

The growing proportion of older persons in the population has a great many implications for the public program of vocational rehabilitation, for the actual number, as well as the proportion, will grow to staggering size, as new drugs, better medical and surgical practices, increased leisure, and other factors contribute to the longevity of our citizens.

According to the 1960 census, almost 53 million of our citizens are 45 or more years old, including 16.5 million who have reached 65 years or more. There is an estimate of chronic illness showing that 5 million of those persons above 45 years have been disabled for at least 3 months by such illnesses as heart and other cardiovascular disorders, arthritis, rheumatism, genito-urinary troubles, or by impairments of limbs, sight, or hearing.

A further projection is that 1.5 million of those over 45 years—including 115,000 who are 65 or more—could probably be rehabilitated into employment. The remaining 3.5 million might not be rehabilitated into employment, but, with appropriate services, could be returned to varying degrees of self-care and nondependence on family or on institutional care. Chart 7 shows the actual results over the past 17 years.

CHART 7.—PERSONS OF 45 YEARS OR MORE REHABILITATED, 1945-62



This cluster of problems is receiving a concentration of attention in the public program. A rapidly growing number of research and demonstration projects is concerned with the complexities of this phase of rehabilitation.

A glowing accomplishment arose out of an early project in New York City, in which the personnel undertook to show that disabled persons of 60 years or more who have been generally regarded as past employment age could be retrained successfully and placed in jobs.

At the close of the 4-year period of OVR support, 498 of 835 participants in the project had been placed; about 200 of them in competitive employment, including one more than 80 years old.

The results of the project led 10 additional groups to establish similar ones in Missouri, Minnesota, Wisconsin, Florida, Texas, Pennsylvania, and the Virgin Islands, all of them helping older disabled men to a new independence.

One of the endeavors in this phase of research is to discover ways to assist older people who are confined to nursing homes and similar institutions to become more nearly self-sufficient.

The University of Michigan, the Illinois Public Aid Commission, Highland View Hospital in Cleveland, and the Utah rehabilitation agency are developing training techniques and methods that will aid chronically ill persons in nursing homes to reach a state of nondependence on facilities or families; and Our Lady of Fatima Hospital in North Providence, R.I., has shown that it is possible to rehabilitate older disabled workers into gainful employment through a comprehensive program of diagnosis and therapeutic services that it has developed.

The Disabled Worker

A phase of rehabilitation for the disabled worker that began with disability insurance provisions of the social security laws has greatly broadened the program's scope of activities on behalf of the aging. The social security amendments make provisions for the payment of insurance benefits to those who become disabled to the extent that they can no longer engage in substantial gainful activity.

Under this legislation, most State rehabilitation agencies have contracted to make initial determinations among applicants for the benefits allowable from the Bureau of Old-Age and Survivors Insurance, to find if they are disabled within the meaning of the law and to assess their capacities for rehabilitation into employment.

There were two immediate effects. A much heavier load was placed on the evaluating machinery of the State agencies; but there was also a considerable increase in the number of identifiable persons whose disabilities made them feasible for rehabilitation services.

There were, for instance, almost 520,000 applicants for OASDI benefits during 1962. The States' screening operations among this group gave a total of more than 53,000 who were judged to have some potential for rehabilitation. Not nearly all of them were finally accepted for services, but, from the total of those cases who entered the rehabilitation process during 1962 and those from previous periods, some 7,270 persons were rehabilitated into employment during the year, and about 15,000 remained on State rehabilitation rolls for more services.

More than half of these persons were 50 years old or more. About 42 percent had limb loss or injuries or other orthopedic impairments, and the others ranged through disabilities of many kinds.

In an effort to give this effort more positive results there are now three demonstration projects—at Tulane University's School of Medicine, The Ohio Rehabilitation Center at Columbus, and the Sister Kenny Institute in Minneapolis—to carry on a coordinated study of OASDI applicants.

From studies of groups of applicants selected at random, the project supervisors are endeavoring to find new and more suitable ways to determine the extent and degree of disability, ability to perform work under limitations of individual handicaps, the indicated treatment, and the prospects for improvement and for eventual employment through rehabilitation practices.

A preliminary report on one of the projects shows that more than 58 percent of those who were evaluated had possibilities for rehabilitation, and another had a 65-percent ratio, considerable increases from the prior level. With refinement of the newer processes even greater percentages may be expected. Most of those involved in the studies are severely disabled people, and the costs of effective rehabilitation services for them will be high.

The Severely Disabled Worker

It frequently happens that severe disabilities are found among the disabled persons receiving monthly disability cash benefits under OASDI provisions.

A new avenue of rehabilitation was opened for such persons in several States in 1961. A type of grant was established by the Office of Vocational Rehabilitation to aid States in meeting unusually high costs of medical or surgical services, or long-term hospital care for gravely disabled persons, if the costs are above the means of the agency. If there is inability to provide the required services in their own areas, States are enabled to purchase the required services where they are available.

Eleven States—Massachusetts, Pennsylvania, West Virginia, Michigan, Texas, Iowa, Arkansas, Nebraska, Utah, California, and Illinois—have so far availed themselves of this new provision and are thus rounding out their abilities to help all eligible disabled workers regain their economic equilibrium.

Living Without Sight

Two basic considerations—both of them intensely practical—shape the activities of the public program of vocational rehabilitation in helping blind persons. The first is preparation of blind persons to perform the ordinary activities of modern life with a minimum of assistance. The second is to prepare them for employment and otherwise make them self-sufficient.

The problems of blind persons are manifest. Because blindness is one of the most conspicuous of disabilities and because blind persons trying to get about arouse emotionalism in the public mind, a great deal is done for them, publicly and privately. Universal sympathy for blind persons has placed activities in their behalf on an international scale. A great deal of experimentation, research, and demonstration is carried on in many countries.

This was the thought behind a joint project of the Office of Vocational Rehabilitation and the American Foundation for the Blind to sponsor an International Congress on Technology and Blindness. It was attended by specialists from many countries.

The delegates to the Congress exchanged information and views on all aspects of blindness. There was particular interest in the work of a group of scientists at Massachusetts Institute of Technology who are engaged in conceiving and developing electronic and mechanical devices to assist blind persons to go about without guides and devices to translate the printed word into some form of communication that blind persons can understand without the use of an intermediary. One of the early things they considered, for instance, was a typewriter that would simultaneously produce Braille and typescript, as a means of simplifying communication for those without sight.

In some immediate aspects of developing increased mobility for blind persons, the Office of Vocational Rehabilitation has provided support for the training of instructors in the known principles of mobility. Short-term courses have been held in conjunction with the American Association of Instructors of the Blind. Long-term courses are in progress at the graduate schools of Boston University and Western Michigan University, and graduates of these courses began to go into the field in 1961.

An interesting phase of providing additional employment for the blind is conducted at Georgetown University in Washington, D.C.

Several young blind persons have been given a fluency in the Russian language, which enable them to teach others and to serve as translators and interpreters. In the 1962 term, additional blind students are pursuing the same course in the German language. These activities help to fill a great need in this field and enable a growing number of blind persons to live independently and with added usefulness to society.

One of the widest single sources of employment for blind persons is the growing number of vending stands they operate in Government establishments, private office buildings, national parks, and similar places. The stands are operated under the general supervision of State rehabilitation agencies and the provisions of the Randolph-Sheppard Act of 1936, which is administered by the Office of Vocational Rehabilitation. There were 2,257 such stands operated during 1962. They did a gross business of more than \$4.5 million and returned an average profit of \$4,140 to 2,425 operators.

The Tragedy of the Deaf-Blind

One of the most completely tragic forms of disability is the person who congenitally is both deaf and blind.

Historically, these persons have been an enigma in rehabilitation. Except in such rare instances as represented by Helen Keller and the lesser-known Robert Smithdas, there has seemed to be little that could be done for them. An inspired group brought together in 1956 by the Industrial Home for the Blind of Brooklyn, however, attacked this most difficult problem with the aid of a grant from the Office of Vocational Rehabilitation.

In a monumental publication issued in 1958, this group provided a comprehensive manual of instruction for dealing with disability. The manual was a realistic appraisal of the situation in which outstanding authorities participated. Greater utilization of the sense of touch was the lever the group advocated to open the minds of these persons, and methods were outlined to reach the understanding of persons who are without use of 2 of the primary senses.

The process has been refined and improved, and confidence has been gained that these persons can be rehabilitated in some degree. In 1962 the Office of Vocational Rehabilitation made another grant which will enable the Industrial Home for the Blind to establish a regional center for instruction of persons who will in turn go forth to become educators in the new service.

The center will prepare people to serve in 15 States in the eastern part of the country, and it is expected that they will eventually reach a good part of an estimated 800 deaf-blind persons over the area.

From there the work will spread to the rest of the country and probably much of the world.

The World Without Sound

Deafness, one of the more inconspicuous disabilities, has not until recent years received the concentrated attention it should have. The problems of the deaf are now undergoing hard study, stimulated by a concentrated effort in many circles to provide greater public understanding of the isolation in which these people live.

Deafness and hearing impairments are among the areas of disability in which the public program of vocational rehabilitation can cooperate with other parts of the nationwide health and education structure to counteract, during the younger years of such disabled persons, some of the effects of their hearing handicaps.

In this kind of operation the child with hearing difficulties can be treated and conditioned during his more formative years, so that by the time of preparation for a vocation he will be in much better position for the public program of vocational rehabilitation to help him.

A considerable volume of research is being performed in the general areas of education of those with hearing problems. Two projects in particular tie into the transitional period for the deaf. Both are under direction of the Clarke School for the Deaf in Massachusetts. One, now reaching the completion stage, is investigating the effects of deafness on the learning process and the relation of learning deficiencies to the vocational and social adjustment of the deaf. The second, just starting, is studying the effects of school experience on the intellectual capacity and personal adjustment of deaf adolescents in preparation for adult vocational life.

Another source of great help was the recent initiation of a grant system by the Office of Education for the training of teachers of the deaf by several qualified institutions. The program started in the fall of 1962, and, at the end of the course, some 400 teachers are expected to enter the field. This is a conspicuous example of interagency cooperation to meet disability problems.

A significant action on behalf of the hard-of-hearing population is taking place currently through a joint effort of the Office of Vocational Rehabilitation and the American Hearing Society. In a demonstration project in the Cleveland area, hearing service centers are being established on the outskirts of the city, which have liaison with central services in Cleveland.

If hearing difficulties of a person in the satellite centers cannot be handled there, then the person can be referred to the metropolitan service. Through a spread of this approach, the established hearing

facilities of the Nation's cities can be expected to reach a considerably larger proportion of rural residents.

One of the more favorable aspects in working with the deaf is their high degree of mobility. A restriction on this, however, is the disposition of some traffic agencies and officials to restrict deaf persons in the operation of motor vehicles.

Statistics show conclusively that deafness is not a serious obstacle to safe driving. The deaf driver compensates by greater visual alertness, and there is no added danger to the public from this source.

Early in 1962 a National Symposium on the Deaf Driver was held in Denver, with the aid of a grant from the Office of Vocational Rehabilitation. Nationally known experts in traffic safety and law enforcement were present, and there was considerable agreement on ways to give greater protection for the rights of deaf drivers.

Training for a Complex Program

There was general recognition when the new vocational rehabilitation legislation was enacted in 1954 that the anticipated growth of the public program would necessitate training of new personnel in the several disciplines that were becoming a part of the nationwide rehabilitation effort.

Many of the complexities of the coming years were beginning to reveal themselves. The concept of help for disabled persons in reaching full potentialities for physical, mental, social, educational, and economic welfare through a selective series of services was gaining ground. It presented the strongest indications of need for an extensive training program.

The 1954 legislation provided a modest start for an immediate training program. In 1955 there was \$900,000 available to provide support for 77 teaching programs, 201 traineeships for students, and 16 short-term courses in several subjects.

Each year has seen an increase. In 1962, with an appropriation of \$9.8 million, grants were made for 420 teaching programs and more than 2,100 traineeships and research fellowships. The climb of Federal grants for training is shown in chart 6.

In allocating available training funds among the professional fields, the Office of Vocational Rehabilitation attempts to achieve a suitable balance related to the more acute personnel shortages, to geographical distribution, and schools' abilities to offer the kind of training needed to improve the work of State agency and other rehabilitation personnel.

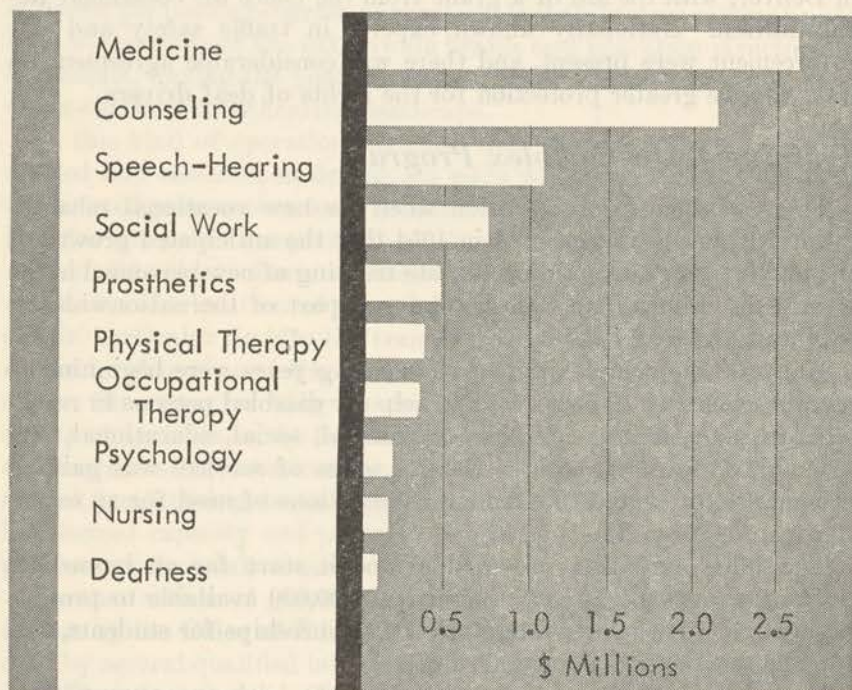
In addition to these considerations, the training program offers encouragement to schools that have or will develop curricula to train specialists in rehabilitation of the blind, the deaf, the mentally re-

tarded, and the emotionally disturbed. There is also support for training that is interdisciplinary in nature, and pilot projects in collaborative practices are encouraged.

Rehabilitation Medicine—A New Specialty

As will be seen from chart 8, a large proportion of training funds is expended in grants for the teaching of medicine.

CHART 8.—1962 TRAINING GRANTS IN AREAS OF SHORTAGES OF PERSONNEL IN VOCATIONAL REHABILITATION



This is purely a reflection of an acute shortage of physicians qualified in the specialty of physical medicine and rehabilitation, one of the newer fields in medicine. The emphasis placed on this discipline is an expression of hope for two results: that there will be an increasing amount of rehabilitation content in the training of medical students and that more practicing physicians will become knowledgeable about rehabilitation concepts and practices.

These hopes have reached new heights in 1962. Teaching grants to schools of medicine went to 53 of the Nation's 89 approved schools of medicine and osteopathy—almost a third more than in 1961 and a marked increase over 1956, the first year of such grants, when 6 schools received awards.

Similar advances are recorded in residency training programs for physicians. In 1955, four physicians received stipends for their residency study in physical medicine and rehabilitation. By 1962, this number had grown to 129, with 24 others pursuing training on a part-time basis.

The Rehabilitation Counselor

The rehabilitation counselor has emerged as the key worker in the public program. It is the counselor who first hears the story of the disabled person and who makes many evaluations and decisions of consequence. The counselor is liaison between the realities of the public program and the individual needs of the disabled person and is a person of growing stature in private and public operations in rehabilitation. The counselor guides the client through the growing complexities and the many technical and social considerations that are involved in the rehabilitation process, balancing its operations with the personal problems of the disabled person and, in many cases, his family.

Consequently, the counselor must have a knowledge of social work, of psychology, of public health and welfare procedures, of medical, surgical, and hospital practices in relation to physical and mental restoration, and of employment practices, especially in his own area. This last factor carries a special responsibility, for it is upon the success of the counselor in matching the abilities of the disabled person with work opportunities that the ultimate success of the public program depends.

There is another growing responsibility in the training program for counselors, brought about by a necessity for specialization. The enlarged category of disabilities with which the public program is concerned—mental illness and retardation are conspicuous among them—is stimulating the provision of training for counselors in the special implications of certain disabilities.

State agencies are placing special counselors in mental hospitals, in rehabilitation centers, sheltered workshops, and a variety of special programs, where they work with the medical profession, social workers, specialists in mental troubles, and vocational experts to evaluate and prepare disabled persons for the prospect of employment.

These are some of the considerations that impel the Office of Vocational Rehabilitation to encourage educational institutions to establish or broaden curricula for counselor training. Its efforts have given rise to two results. One is that the total of training grant awards for counseling is second only to those for medicine. The second is that the number of grants in support of counselor training has risen from 25 in 1955 to 34 in 1962, but with the number of traineeships making the startling gain from 53 to 639 in that period.

Even so, the growing number of persons attracted to counseling as a vocation is not meeting the requirements of the public program. The rate of graduation from these courses is about 250 a year, and the estimated need is two to three times that number.

The potential employers of counselors—State agencies, clinics, hospitals, rehabilitation centers, and others—recognize the need for well-trained counselors, and the salary scale is coming into line with the extent of training and the capacities of graduates of counseling courses.

Meeting Other Shortages

There are serious shortages in other disciplines that are allied to the public program of vocational rehabilitation. One of them is the number of trained persons in the field of speech and hearing.

An estimated 8 to 9 million of our people have speech and hearing difficulties. Currently there are about 10,000 clinicians to serve them, half the number needed to provide an adequate volume of services. Here again is a situation in which the Office of Vocational Rehabilitation's training program has made great advances through grants in this area over the past 3 years.

Since the training program began to emphasize courses in speech and hearing therapy in 1959, the number of grants for this purpose has multiplied three times; the total amount of awards has increased almost three times; and the number of trainees has increased three times. Yet to come close to the need for personnel in this field the number of graduates for this discipline must grow six times over the number of those who finished their courses in 1962.

There are grave shortages in physical therapy, occupational therapy, in psychologists, in prosthetists, in social workers.

In occupational therapy the estimated need is for 16,000, the number in practice is about 6,000, and there are about 500 graduates each year.

The shortage of physical therapists is acute. The present number of 8,400 in practice should be one-third more. Enrollments in approved courses are far below capacity. In consequence the Office of Vocational Rehabilitation has initiated a system of undergraduate trainee grants to attract students, and in 1962 all but 4 of 40 approved schools had such projects in operation.

The Rehabilitation Team

Since orthopedic impairments constitute the major disability among persons seeking rehabilitation services, the facilities for training prosthetists (specialists in the design and fitting of artificial limbs and

other assistive devices) and orthotists (specialists in the making and fitting of braces) are of significant interest in the program.

It was a constant preponderance of orthopedic cases on the rolls of State rehabilitation agencies that led to development of "team" therapy for physical restoration.

For a decade practitioners of several disciplines that since have grown into integration with the rehabilitation program attended college courses that provided instruction in orthopedic practices. In 1957, the Office of Vocational Rehabilitation began to make grants to several universities where such courses were given, so as to extend knowledge of orthopedic practices. There immediately arose the feeling that, if all these disciplines could be brought together in rehabilitation centers and hospitals, their combined effect would speed up the rehabilitation process immeasurably.

It became evident to workers in the public program several years ago that the impact of disability of the individual had wide ramifications. Loss of income, strains on family relationships, physical shock, mental depression—these and other matters had great bearing on the success of rehabilitation services. So there were added to the team the physical therapist to restore physical functions and teach the uses of prostheses; the occupational therapist to test, evaluate, and restore manipulative abilities; the psychologist and psychiatrist to examine and improve the mental state; and the social worker to help with the inevitable personal problems that arose.

The growth of this concept has brought greater demand for orthopedic specialists. They are needed in the growing number of rehabilitation centers that are being established or expanded, in hospitals that are getting into rehabilitation work, and in clinics and other institutions where they can help the orthopedically disabled regain or improve their bodily functions.

In 1962 almost 1,400 people associated with rehabilitation were enrolled in 78 short-term courses that had OVR support, to become acquainted with orthopedic and orthotic principles. At the same time, several universities and other groups were delving deeper into research designed to enrich all the services that are available for orthopedically handicapped persons.

The Social Worker in Rehabilitation

In the modern concept of rehabilitation there is no room for neglect of the implications that disability has on the individual lives of those who are vocationally and socially handicapped.

The social worker has been called into the rehabilitation scheme to provide skilled assistance in helping to relieve the anxieties that arise with disability—to relate the disabled person to his situation, to his

family, and to the community, and to resolve any difficulties that are created or intensified.

The social worker also has a place in the broader aspects of State and community rehabilitation programs, in activities that help to sell the rehabilitation program itself to the community, and to organize the resources of the area for meeting its rehabilitation problems.

Social work in rehabilitation requires, of course, a special knowledge of the public and voluntary programs for helping the disabled. In recognition of this, the Office of Vocational Rehabilitation makes teaching grants to accredited schools of social work. In 1962, 34 of 56 accredited schools were awarded such grants, and 40 schools had traineeship grant awards for 169 students.

This amount of training is far below the level that will produce an adequate number of social workers for the program, for at least 1,500 graduates are needed each year for vacancies in health and rehabilitation work.

The Rehabilitation Facility

In the rapid expansion of the public program of vocational rehabilitation and the evolution of new concepts of disability, of a new image of the disabled, and the purposes and uses of the program, there developed naturally a new concept of rehabilitation facilities.

A facility, in the usual language of the public program, is an inclusive term embracing many kinds of places where rehabilitation services are available. New kinds of facilities come into being for many reasons, and, over the years other kinds have faded away.

In the beginning, rehabilitation facilities were almost always medical in nature. But, as physical restoration grew in accomplishment, there came a natural query about work for those who became employable.

The answer is in facilities that are now available. There was organization of centers which specialized in vocational services, and this led to development of vocational counseling, of work evaluation of the disabled, and other special vocational services.

Yet there was need for another kind of facility, and there evolved the psycho-social center. It was concerned with the increasingly baffling problems of motivation, where mental and emotional problems of many persons lowered their probabilities for employment.

It became obvious, too, that all disabled persons cannot be placed in private, competitive employment after physical or mental restoration. Many persons are revealed as having little possibilities for open jobs. Others need specific training, work experience, and personal adjustment. So many new sheltered workshops came into being, and they are of two principal types.

One provides work experience and adjustment leading to private

employment. The second deals with disabled persons who, for any of a variety of reasons, need long-term jobs doing work compatible with their condition, in terms of physical capacity and daily hours. There are, too, workshops that provide services of both kinds. Some are created and maintained by private or community groups—for which Government financial aid is available—and others by State rehabilitation agencies.

Another kind of facility that is growing in usefulness is the halfway house. This kind of facility is an adjunct to rehabilitation of the mentally ill. Halfway houses are built around a homelike atmosphere where selected patients who are discharged from mental hospitals may spend a transitional period between institutional care and life in the community.

Still another type is the evaluation center, which specializes in highly intensive rehabilitation diagnoses and evaluations, to chart courses in individual cases for the reaching of specific goals through the variety of services available.

Many hospitals are creating rehabilitation facilities as part of their services. Not all attempt to be comprehensive but are especially concerned with getting indicated rehabilitation measures started as early as possible.

With the broadened scope of the public program there has risen a good measure of response from State rehabilitation agencies—and from private and community sources, too—in building a variety of large rehabilitation centers.

These also vary in types and purposes. Some centers serve persons with one type of disability. Others work among larger categories of handicaps, and many offer a virtually complete series of services to persons with most types of disabilities. Some are operated by State rehabilitation agencies, using portions of their basic grants in combination with their own funds. Others may be created with the help of funds that are available through the Medical Facilities Survey and Construction Act, enacted in 1954. This legislation was an amendment of the Hill-Burton hospital construction legislation of an earlier date and allowed Federal funds to be granted to aid the construction of rehabilitation facilities. Thirty-nine new facilities of various kinds, sizes, and types were established or expanded in 1962 with the aid of Hill-Burton grants. Their total cost was \$26.8 million, of which the Federal contribution was approximately one-third.

There are large rehabilitation centers operated by six States—Pennsylvania, Virginia, Iowa, West Virginia, Georgia, and Arkansas, as well as one in Puerto Rico. But there are other large centers—notably in Mobile, Ala.; the Institute of Physical Medicine and Rehabilitation in New York City; the Rehabilitation Center of Minneapolis; the Goodwill Industries in Omaha, Cincinnati, and the District of

Columbia; the National Orthopaedic and Rehabilitation Hospital in Arlington, Va.; and the Carruth Center in Dallas, among others—where rehabilitation is practiced according to modern concepts and practices, with the preponderance of construction and operating funds arising in private sources, but with Federal aid in most cases.

The role of the large rehabilitation center is essentially to provide an appropriate setting where specialized staffs can apply modern techniques and provide adequate services to more people, rapidly and conveniently.

This role is reaching greater fulfillment with new kinds of activities. New York University and The University of Minnesota received grants from the Office of Vocational Rehabilitation to create rehabilitation research training centers within the clinical settings they afford. Similar regional centers may be established soon.

The objective is to combine, in schools of medicine where physical medicine and rehabilitation can be taught, their resources for research and training and develop new methods of rehabilitation under the most favorable circumstances.

Rehabilitation Around the World

A general awakening to the needs and possibilities for rehabilitation of the disabled has been noted in many countries in the past few years, particularly in new nations that have arisen as political entities, and some older countries that have recognized need for more attention to health and rehabilitation.

In some of these countries rehabilitation research and activities had begun in 1960, and others stood ready to begin but lacked funds and guidance. In that year the Office of Vocational Rehabilitation was given authority to spend more than \$900,000 in counterpart funds in several countries to establish research resources for investigation of rehabilitation problems pertinent to their own needs, with the probability of international interest as well.

The counterpart funds are available for international research under provisions of Public Law 480—the Agricultural Trade Development and Assistance Act. Surplus commodities sold by the United States to certain countries build up these foreign currency credits, which are expendable within their borders for beneficial purposes, with approval of the U.S. Congress.

Counterpart funds for international research are now available in India, Israel, Pakistan, UAR-Egypt, Brazil, Burma, Poland, Yugoslavia, Indonesia, and Syria.

The Office of Vocational Rehabilitation has approved 26 research projects in these countries—11 in Israel, 9 in India, 3 in Brazil, and 1 each in UAR-Egypt, Burma, and Pakistan. Others are being prepared.

The legislation also provides the way for an exchange of scientists between the United States and various countries which are capable in disciplines related to rehabilitation.

Arrangements have been made under which 18 surgeons from some of the outstanding medical schools of the United States will perform research in plastic surgery with victims of leprosy at the Christian Medical College in Vellore, India. Six have gone to India in the past 10 months, each for a 2-month period. Many of the techniques they have perfected for these people have been used successfully in the United States in treating similar disabling conditions arising from disease or accidents.

In the other direction, two Indian experts in cerebral palsy are to perform research in two U.S. rehabilitation centers, and plans are in the making for exchanges of other experts with other countries.

Programs of study, consultation, and observation were arranged by OVR for 110 individuals from 42 countries interested in rehabilitation of the disabled who were brought to the United States by the Agency for International Development, the United Nations, World Health Organization, the Department of State, by voluntary agencies and foundations, or were sent by their own governments. Among these were officials from newly independent countries such as the Congo, Senegal, and Somalia and administrators and specialists from Malaya, Ceylon, and Turkey, where programs for the disabled are being established or expanded, who came to study program administration and operation.

The Hard Fight Against Dependency

The public program of vocational rehabilitation has been a crusade in many respects, and a great deal of the spirit of the crusader, as well as the pioneer, remains in the program. The movement toward an ultimate goal of 200,000 rehabilitations of the disabled each year into employment and other satisfactions of life requires an even greater amount of imagination, of expediency, and determination to encompass all the complexities inherent in the kind of rehabilitation structure that is being built.

There are, in reality, three facets of the vocational rehabilitation program. One is the humanitarian side, concerned with the personal problems of the individual. The second is the economic worth of vocational rehabilitation. And the third is the inroad that the program is making into the haunts of dependency.

The humanitarian side of the program is obvious. There is great warmth in the knowledge that more than 600,000 disabled persons have been helped to overcome their handicaps in the past 8 years and are pursuing their own forms of happiness in their own ways.

It is when we look at rehabilitation measures as a defense against

the further encroachment of dependency on human dignity, as well as on the public purse, that the course of rehabilitation becomes more clearly marked.

Already the Congress has moved to realine the relationship between public welfare and vocational rehabilitation agencies so that the developing facilities of the rehabilitation program can be used to reduce the costs of public assistance and its eroding effects on the human spirit.

President Kennedy summed up the aims of new public welfare amendments when he signed the measure in July 1962. He said:

"This measure embodies a new approach—stressing services in addition to support, rehabilitation instead of relief, and training instead of prolonged dependency. This important legislation will assist our States and local public welfare agencies to redirect the incentives and services they offer to needy families and children and to aged and disabled people. Our objective is to prevent and reduce dependency and to encourage self-care and self-support—to maintain family life where it is adequate and to restore it where it is deficient."

This new legislation underlines an unprecedented challenge to those concerned with vocational rehabilitation—both public and private agencies—to serve disabled persons who get public assistance and to serve them well. Several hundred thousand adults with physical or mental disabilities get public assistance. How many of them could be restored to employment cannot be foretold. But a large number of referrals to State rehabilitation programs come from public welfare sources, and a considerable part of rehabilitation energy will go toward services for them.

There is another facet of dependency that arises from disability. Most of those who are acquainted with rehabilitation matters know that disability often involves a whole family and its relationships.

For a long time there have been cooperative agreements in every State between their welfare and rehabilitation agencies, so that, where disability strikes hard at families to bring dismaying financial circumstances, there will not be unrelieved suffering.

This relationship between welfare and rehabilitation activities has come under renewed scrutiny in recent years. Now, greater emphasis is being placed on cooperative measures designed to strengthen this relationship—to reduce family frustrations, to provide food, clothing, and shelter where these are lacking, to hold families together, and to counsel the members in living with a disability in the family while the rehabilitation process is going on with a disabled member.

This is a necessary direction for the program to take. It requires service out of the normal range of the rehabilitation program. Intensive social services that can be performed best by State welfare agencies come into play here, so that a climate can be maintained for the disabled person that is conducive to rapid restoration of physical abilities and a return to work.

Table 1.—Number of referrals and cases, by agency, fiscal year 1962

Agency ¹	Referrals				Cases				
	During fiscal year			Remain- ing at end of year ³	During fiscal year				Re- main- ing at end of year ⁴
	Total	Accepted for services	Not ac- cepted for services ²		Total active load (re- ceiving services)	Closed from active load			
						Reha- bili- tated	After reha- bili- tation plan initiated ⁴	Before reha- bili- tation plan initiated ⁴	
United States, total.....	439,401	148,763	150,903	139,735	345,635	102,377	14,524	20,649	208,085
Alabama.....	7,176	4,022	937	2,217	9,901	3,059	427	601	5,814
Alaska.....	371	139	70	162	342	77	19	19	227
Arizona:									
General.....	1,854	588	548	718	1,350	405	99	91	755
Blind.....	134	60	45	29	136	32	11	3	140
Arkansas.....	7,840	2,979	3,240	1,621	5,806	2,500	226	124	2,956
California.....	29,980	7,594	17,202	5,184	17,331	2,670	1,249	2,927	10,485
Colorado.....	4,534	1,884	1,261	1,389	4,299	1,243	517	223	2,310
Connecticut:									
General.....	3,018	1,561	621	836	4,211	907	211	307	2,786
Blind.....	179	86	62	31	212	58	21	0	133
Delaware:									
General.....	1,116	554	351	211	1,242	527	20	61	634
Blind.....	50	24	20	6	48	18	6	3	21
District of Columbia.....	4,011	1,288	1,873	850	2,915	847	261	228	1,579
Florida:									
General.....	20,175	6,009	8,918	5,248	11,303	4,000	611	613	6,079
Blind.....	4,338	491	2,500	1,347	1,183	301	61	42	779
Georgia.....	22,776	7,485	5,874	4,417	13,596	6,105	424	484	6,583
Guam.....	96	33	32	31	77	13	5	13	46
Hawaii:									
General.....	2,043	528	863	652	1,134	240	76	51	767
Blind.....	29	10	6	13	48	4	2	2	40
Idaho:									
General.....	2,003	470	931	602	1,029	385	49	7	588
Blind.....	38	20	14	4	57	15	3	3	36
Illinois.....	11,608	6,193	3,132	2,283	15,310	3,926	978	1,370	9,036
Indiana:									
General.....	3,666	1,945	904	817	4,809	1,434	138	186	3,051
Blind.....	141	39	38	64	185	31	18	17	119
Iowa:									
General.....	6,237	1,789	1,756	2,692	4,285	1,293	185	175	2,632
Blind.....	189	79	39	71	230	50	3	7	170
Kansas:									
General.....	3,609	1,523	883	1,203	3,415	1,087	130	237	1,961
Blind.....	389	122	110	157	304	85	11	13	195
Kentucky.....	7,171	2,103	2,726	2,342	4,370	1,776	120	248	2,226
Louisiana:									
General.....	5,370	3,124	1,208	1,038	8,750	2,037	318	591	5,804
Blind.....	825	187	210	428	713	122	8	13	570
Maine:									
General.....	2,026	486	644	896	1,221	360	48	88	725
Blind.....	246	131	81	34	303	72	22	52	157
Maryland.....	6,628	2,638	1,909	2,081	6,361	1,691	342	696	3,632
Massachusetts:									
General.....	11,128	2,496	4,479	4,153	5,809	1,661	214	537	3,397
Blind.....	309	141	28	140	428	88	26	20	294
Michigan:									
General.....	9,970	4,074	2,270	3,626	10,258	3,181	487	169	6,421
Blind.....	342	165	76	101	454	81	35	31	307
Minnesota:									
General.....	6,944	2,048	2,607	2,289	5,964	1,377	314	164	4,109
Blind.....	1,108	192	403	513	507	99	32	21	355
Mississippi:									
General.....	3,562	1,695	774	1,093	3,772	1,392	96	145	2,139
Blind.....	1,118	347	538	233	953	283	82	42	546
Missouri:									
General.....	8,682	2,852	3,078	2,762	5,924	1,930	235	234	3,525
Blind.....	760	183	294	283	522	187	26	30	279
Montana:									
General.....	2,401	921	777	703	2,012	456	40	92	1,424
Blind.....	414	36	286	92	87	24	3	0	60
Nebraska:									
General.....	1,663	795	267	601	2,554	634	64	112	1,744
Blind.....	242	63	115	64	152	57	8	5	82
Nevada:									
General.....	764	235	457	72	393	120	62	46	165
Blind.....	50	21	5	24	56	16	2	3	35

See footnotes at end of table.

Table 1.—Number of referrals and cases, by agency, fiscal year 1962—Con.

Agency ¹	Referrals				Cases				
	During fiscal year			Remain- ing at end of year ³	During fiscal year			Re- main- ing at end of year ⁴	
	Total	Accepted for services	Not ac- cepted for services ²		Total active load (re- ceiving services)	Closed from active load			
						Reha- bili- tated	After reha- bili- tation plan initiated ⁴		Before reha- bili- tation plan initiated ⁵
New Hampshire:									
General.....	626	353	181	92	789	198	88	19	484
Blind.....	73	29	4	40	76	15	2	6	53
New Jersey:									
General.....	7,706	2,963	2,198	2,545	5,872	1,888	252	253	3,479
Blind.....	930	203	323	404	541	143	33	9	356
New Mexico:									
General.....	1,345	328	569	448	668	286	43	17	322
Blind.....	214	45	66	103	127	35	5	7	80
New York:									
General.....	31,745	10,571	10,226	10,948	23,355	7,008	733	1,493	14,121
Blind.....	1,418	525	266	627	1,154	332	47	73	702
North Carolina:									
General.....	11,311	6,303	3,360	1,648	15,435	5,647	450	542	8,796
Blind.....	1,588	640	602	346	1,549	455	17	103	974
North Dakota:									
General.....	1,899	495	478	926	1,336	372	40	72	852
Ohio:									
General.....	9,891	3,916	3,068	2,907	8,452	2,391	281	620	5,160
Blind.....	936	425	213	298	1,153	201	61	101	790
Oklahoma:									
General.....	7,292	3,091	1,944	2,257	8,886	1,913	161	512	6,300
Oregon:									
General.....	6,032	1,200	2,603	2,229	2,698	670	186	214	1,628
Blind.....	245	58	116	71	156	40	6	8	102
Pennsylvania:									
General.....	37,139	12,760	10,867	13,512	27,578	9,060	1,215	800	16,503
Blind.....	2,020	309	668	1,043	998	251	26	41	680
Puerto Rico:									
General.....	9,900	1,653	1,967	6,280	5,702	1,226	116	282	4,078
Rhode Island:									
General.....	3,891	1,329	653	1,909	2,891	871	158	20	1,842
Blind.....	129	100	9	20	289	59	16	20	194
South Carolina:									
General.....	12,193	4,144	5,079	2,970	8,196	2,380	169	309	5,338
Blind.....	402	162	168	72	375	113	10	19	233
South Dakota:									
General.....	1,272	357	229	686	1,033	276	45	6	706
Blind.....	513	49	216	248	121	27	5	2	87
Tennessee:									
General.....	9,690	3,253	2,966	3,471	7,540	2,612	276	269	4,383
Blind.....	1,211	334	400	477	868	302	23	37	506
Texas:									
General.....	14,352	4,457	6,686	3,209	11,754	2,931	748	1,164	6,911
Blind.....	1,235	390	526	319	849	378	18	26	427
Utah.....	1,963	851	556	556	2,318	581	87	38	1,612
Vermont:									
General.....	1,263	283	170	810	828	226	53	31	518
Blind.....	56	21	27	8	50	18	4	2	26
Virginia:									
General.....	16,122	4,384	7,343	4,395	9,436	3,517	219	646	5,054
Blind.....	704	138	198	368	299	107	11	6	175
Virgin Islands:									
General.....	102	27	0	75	86	31	0	0	55
Washington:									
General.....	5,092	1,536	2,221	1,335	4,052	1,100	217	354	2,381
Blind.....	302	117	109	76	283	68	17	13	185
West Virginia:									
General.....	17,155	5,451	4,063	7,641	13,477	3,710	69	1,283	8,415
Wisconsin:									
General.....	9,480	2,846	3,914	2,720	7,367	1,811	226	74	5,256
Blind.....	153	86	31	36	236	53	14	8	161
Wyoming.....	488	133	158	197	391	119	32	4	236

¹ In States with 2 agencies, the State division of vocational rehabilitation is designated as "general," and the agency under the State commission or other agency for the blind is designated as "blind."

² Services declined, services not needed, individual not eligible, individual needing services other than vocational rehabilitation, referred to other agencies, migratory shifting of the individual, etc.

³ Eligibility for rehabilitation not yet determined.

⁴ Closed after rehabilitation plan was initiated; received rehabilitation service but never reached the point of employment because of personal factors, illness, aggravated disability, etc.

⁵ Closed prior to initiation of rehabilitation plan because of indifference of individual, increase in degree of disability, loss of contact, etc.

⁶ In process of rehabilitation on June 30, 1962.

Table 2.—Vocational rehabilitation grants, 1962, State divisions of vocational rehabilitation

State or territory	Support grants	Extension and improvement grants	Total
Total.....	\$56,503,310	\$904,655	\$57,407,965
Alabama.....	2,578,524	21,117	2,599,641
Alaska.....	129,912	-----	129,912
Arizona.....	456,770	8,549	465,319
Arkansas.....	1,832,540	14,500	1,847,040
California.....	3,135,950	128,537	3,264,487
Colorado.....	785,506	14,256	799,762
Connecticut.....	330,549	16,521	347,070
Delaware.....	134,341	5,000	139,341
District of Columbia.....	223,802	6,179	229,981
Florida.....	1,877,901	-----	1,877,901
Georgia.....	3,363,693	32,025	3,395,718
Guam.....	76,761	5,000	81,761
Hawaii.....	207,125	5,094	212,219
Idaho.....	191,116	-----	191,116
Illinois.....	2,360,002	77,260	2,437,262
Indiana.....	559,477	12,921	572,398
Iowa.....	785,574	17,064	802,638
Kansas.....	648,165	13,600	661,765
Kentucky.....	735,226	24,710	759,936
Louisiana.....	1,703,771	-----	1,703,771
Maine.....	252,054	7,900	259,954
Maryland.....	715,125	-----	715,125
Massachusetts.....	1,122,039	33,522	1,155,561
Michigan.....	1,370,650	63,644	1,434,294
Minnesota.....	1,065,596	27,784	1,093,380
Mississippi.....	789,707	-----	789,707
Missouri.....	995,078	28,099	1,023,177
Montana.....	275,223	5,499	280,722
Nebraska.....	284,338	7,644	291,982
Nevada.....	60,468	-----	60,468
New Hampshire.....	116,445	-----	116,445
New Jersey.....	1,039,797	39,102	1,078,899
New Mexico.....	211,386	7,245	218,631
New York.....	4,220,173	11,250	4,231,423
North Carolina.....	1,955,857	37,003	1,992,860
North Dakota.....	390,939	5,142	396,081
Ohio.....	1,213,735	63,178	1,276,913
Oklahoma.....	1,454,710	18,920	1,473,630
Oregon.....	565,652	12,270	577,922
Pennsylvania.....	4,934,167	16,987	4,951,154
Puerto Rico.....	1,004,298	-----	1,004,298
Rhode Island.....	364,055	5,738	369,793
South Carolina.....	1,300,780	-----	1,300,780
South Dakota.....	249,991	4,425	254,416
Tennessee.....	1,480,909	-----	1,480,909
Texas.....	1,605,449	77,990	1,683,439
Utah.....	283,481	6,570	290,051
Vermont.....	198,263	2,351	200,614
Virginia.....	1,420,517	-----	1,420,517
Virgin Islands.....	25,193	-----	25,193
Washington.....	771,091	-----	771,091
West Virginia.....	1,429,335	15,059	1,444,394
Wisconsin.....	1,111,345	-----	1,111,345
Wyoming.....	108,759	5,000	113,759

Table 3.—*Vocational rehabilitation grants, 1962, State commissions or agencies for the blind*

State or territory	Support grants	Extension and improvement grants	Total
Total.....	\$6,446,690	\$153,617	\$6,600,307
Arizona.....	91,730	2,140	93,870
Connecticut.....	60,703	4,133	73,836
Delaware.....	34,665	-----	34,665
Florida.....	499,654	-----	499,654
Hawaii.....	50,000	-----	50,000
Idaho.....	34,906	-----	34,906
Indiana.....	61,241	-----	61,241
Iowa.....	190,589	5,326	195,915
Kansas.....	214,000	1,950	215,950
Louisiana.....	175,000	-----	175,000
Maine.....	94,944	-----	94,944
Massachusetts.....	214,843	4,500	219,343
Michigan.....	120,619	-----	120,619
Minnesota.....	223,062	-----	223,062
Mississippi.....	386,734	-----	386,734
Missouri.....	247,266	-----	247,266
Montana.....	46,222	-----	46,222
Nebraska.....	70,782	3,822	74,604
Nevada.....	21,752	-----	21,752
New Hampshire.....	30,757	-----	30,757
New Jersey.....	191,632	-----	191,632
New Mexico.....	55,303	-----	55,303
New York.....	567,762	22,222	589,984
North Carolina.....	587,597	-----	587,597
Ohio.....	349,245	8,595	357,840
Oregon.....	106,381	-----	106,381
Pennsylvania.....	404,995	66,482	471,477
Rhode Island.....	81,927	-----	81,927
South Carolina.....	92,131	-----	92,131
South Dakota.....	66,558	1,106	67,664
Tennessee.....	379,181	-----	379,181
Texas.....	295,265	-----	295,265
Vermont.....	47,787	500	48,287
Virginia.....	125,000	9,656	134,656
Washington.....	122,806	23,185	145,991
Wisconsin.....	94,651	-----	94,651

Saint Elizabeths Hospital

PSYCHIATRY as a specialty of medicine continues to evolve rapidly. New ideas, some of them rediscovered from past experience, are being proposed in the care of patients. Research into the causes of mental disorder is progressing rapidly, as is the training of much-needed personnel. In all these fields Saint Elizabeths is active and is endeavoring in every way possible to further its traditional position of leadership. Much of the care of the mentally ill takes place in the community at the hands of private practitioners, but there still is a need of mental hospitals, and presumably there always will be. In the treatment of mental illness the social concepts are gaining strength. There is a greater use of community resources such as foster homes, nursing homes, halfway houses, and outpatient clinics.

The role of public education is an important one; the understanding and tolerance of the community have increased markedly, thanks to the attempts of various agencies to bring about a greater public understanding of the nature of mental disorder. At present some debate is underway as to the relative merits of the small and the large mental hospitals, and it is being urged that no hospitals of over 1,000 beds be maintained or established. The fact is, however, that some hospitals, Saint Elizabeths among them, are considerably larger than that allegedly ideal maximum. It has been suggested, too, that large hospitals be broken down into smaller units. There is much of value in the smaller units, but it should not be forgotten that structure in an organization is necessary and that the various parts cannot be allowed to go their separate ways without control or coordination. The trend is toward reducing, rather than increasing, the population of mental hospitals by more intensive early treatment, by establishing new hospitals, and by sending more patients back to the community for care there rather than keeping them in the institutions. Saint Elizabeths

has not been unmindful of this tendency and actually during the year reduced its resident population by 160 in spite of the highest admission rate since 1945.

For the first time in 17 years the admissions to the hospital exceeded 2,000, the actual number being 2,024. During the same period 1,649 patients were discharged, or 81 percent as many as were received. Somewhat more voluntary patients were admitted informally, namely, 251. This rate of only 12.3 percent is far below what it should be. Through an arrangement with the District of Columbia Health Department, voluntary patients may now be admitted at any time, including weekends and evenings. An increase in the voluntary admissions is much to be desired, especially in view of the fact that the commitment laws of the District of Columbia continued to be among the most legalistic, cumbersome, and traumatic to the patient of any jurisdiction in the United States. It is encouraging to note that a bill has been introduced in the Congress which would moderate some of the inequities and undesirable features of the present commitment laws.

The aged continue to be a serious problem, as does the chronicity of a considerable number of the patients. At the close of the fiscal year, 63 percent of the patients in the hospital had been in residence for 5 years or more. The difficult problems of the care of the chronically mentally ill and of the aged are receiving much attention and hopefully some satisfactory arrangement can be worked out. Desirable as it is to reduce the population of mental hospitals, it should not escape attention, as it sometimes seems to do, that the aged and the chronically mentally ill are sick persons and are entitled to suitable medical care. They should not be relegated to some modern equivalent of the oldtime "poor farm."

The principal problems of the hospital continue to be overcrowding and understaffing. During the year, thanks to an increased appropriation by the Congress, there were over 233 net additions to the hospital personnel. Ten physicians were among these, as were 23 graduate nurses, an encouraging state of affairs. There are many needs, however, in all the activities of the hospital. A survey recently made would indicate that instead of the present 3,515, the hospital should ideally have a total personnel of as many as 8,200. An active recruiting program has been underway during the past year in all fields, with particular emphasis on the ward personnel. Under Civil Service rules physicians now receive salaries at the "top of the grade," but it is highly doubtful whether the salaries are yet on a really competitive basis with the States or with private practice. It should be pointed out, indeed, that one Government agency is permitted by law to pay a 15-percent premium to diplomates of speciality boards.

A bill has finally been proposed which would extend this provision to Saint Elizabeths Hospital; such legislation has not yet been enacted.

The general health of the hospital population has been good, thanks to the continuing efficient efforts of the physicians, nurses, dietitians, sanitarians, and the rest of the hospital personnel. All the accepted types of treatment are being utilized, among them individual and group psychotherapy, milieu therapy, drug therapy, electroshock, habit training, and various methods of resocializing the patients. One habit-training program was developed during the year very successfully, but there have been others as well, both recently and in the past. One project was that of interesting a group of patients in repairing toys which might be given to the needy children at the District of Columbia Village or other institutions. Much has been done in recreation, and in the John Howard Pavilion a "Gavel Club" was organized. The rehabilitation activities have been extended and amplified, and the number of patients released to the community, many of them on a self-supporting basis, is most gratifying. In a number of areas remotivation programs have been undertaken very successfully. The number of open wards has been increased; self-government activities have been encouraged; and in every way an effort has been made to create a permissive, encouraging, and optimistic atmosphere among the patients. A special program has been set up to deal with the young adults, children, and adolescents. There are in the hospital 5 children under 12, 46 adolescents (13 to 18), and 6 young adults (19 years of age or slightly older). In an institution designed primarily for adults, these patients have not benefited to the full from the programs which were available, but it is now expected that much more can be done for them in the line of education and training.

One problem which has caused much concern at the hospital is the continued very free use by the patients of petitions for writs of habeas corpus. The right to file such writs is, of course, guaranteed by the Constitution, but some of the petitions are repeated frequently and are quite obviously frivolous. During the year, for example, 187 orders to show cause were served on the hospital, and 169 orders to produce the patient in court on a writ of habeas corpus. Only eight releases were granted, a fact which in itself suggests that most of the writs had little if any basis. Since every hearing calls for the presence of a physician and sometimes of several, the drain on the physicians' time is inordinate. During the year, in fact, 1,084 hours were spent in court by the doctors. The hospital has suggested formally to the court that arrangements be made to hold the hearings at the hospital. This would save much time, both on the part of the judges and of the physicians. Some administrative improvements have been made in

the court, thanks to the interest of the chief judge, but much improvement is yet possible.

In the field of public education the hospital has taken its part. In May "Mental Health Week" was held, with suitable community arrangements in the line of lectures and sermons, a public dramatic production, and an "open house." The total number of visitors on the two latter occasions was about 3,000. A program was prepared and distributed to approximately 450 radio stations. In addition, State and county hospitals and mental health associations have requested the transcriptions for their libraries. This is a series of 5-minute talks, and the reception seems to have been very favorable. Indeed, considerably over 300 stations have indicated their desire for an extension of the program. The Information Officer has been very active; 10 feature articles appeared in the local papers, plus many news items, and a TV presentation of the activities of the hospital is being prepared. A publication known as the "Saint Elizabeths Reporter," designed primarily for hospital personnel, was established during the year. As usual the hospital has been visited by many professional persons, physicians, social workers, and others from many foreign countries, 23 nations being represented this year. It is always a source of satisfaction and stimulation to have such visitors. Many Government agencies, and those of the District Government, have cooperated with the hospital and to them thanks are extended. The same is true of various private groups and individuals, notably volunteers. These groups are altogether too numerous to mention, but the value to the patients, to the hospital, and to the public's understanding is inestimable.

The program of training has been not only continued but expanded during the year. The accreditation by the Joint Commission has been renewed. A third-year chaplaincy residency has been set up, as has a residency in psychodrama. Training is given at the hospital in these fields among others: internships (the only public mental hospital in the United States so approved), residencies in psychiatry, pathology, surgery, radiology, physical medicine, psychology, occupational therapy, psychodrama, and field training in social work and recreational therapy. Some of these activities will be detailed below. Forty percent of the costs of training are now borne by the Federal Government. This in itself is a recognition of the national importance of the hospital.

Research activities of the hospital have been very considerably extended. The joint project between the National Institute of Mental Health and the hospital, known as the Clinical Neuropharmacology Research Center, has been in operation for 5 years with most gratifying results. In addition, a behavioral studies program operated

largely with hospital funds is in successful operation. In that program some criminological studies have been undertaken during the past year, as well as some researches in experimental psychology. It is proposed to set up a third division (the others being the Medical and the Administrative Divisions) in the hospital to be known as the Behavioral and Clinical Studies Division, but final approval has not yet been given by the Department on that proposal.

Psychiatric Services

Brief comments relative to the clinical activities of the hospital follow herewith. There are four admission services, each under a clinical director: Dix Pavilion for civil patients under 64, the Geriatric Service for patients over 64, the John Howard Pavilion for male prisoner patients, and the William A. White Service, which is basically a research service operated jointly with the National Institute of Mental Health. The other wards and services of the hospital are divided between two clinical directors. The general supervision of the activities of the clinical directors is vested in the first assistant physician.

MEDICAL AND SURGICAL BRANCH

This Branch, although not an admission service, plays an extremely important part in the operation of the hospital. It furnishes specialized medical and surgical services to the patients of the hospital, both of an inpatient and outpatient nature. The present main building of this Branch, the so-called Medical and Surgical Building with a capacity of 179 patients, is over 30 years old and with the advancing techniques and activities of medicine is, at present, highly inadequate. A recent study was made by a firm of hospital consultants, and it is hoped that in the very near future funds may be forthcoming for plans for a building to replace or supplement the present building. Considerable improvement of the operating rooms has been undertaken during the past year. A neurology service has been added, and the dental services have been much expanded. During the year 2,222 inpatients were cared for in the Branch (a total of 186,386 patient-days), and 62,000 patients received outpatient care. In the podiatry clinic, 4,350 patients were seen; and in the dental service there was an increase of 1,500 over the preceding year, a total number of 4,528 patients receiving care. A speech and audiology clinic has been added recently; much research work is planned in this interesting but somewhat neglected field. The staff has been increased in the Medical and Surgical Branch, and care of a high order is being given to the patients who come under its attention. Much better service can be rendered, however, when the new building becomes a reality.

NURSING BRANCH

The basic responsibility for the ward care of patients is vested in this Branch, which is effectively discharging this duty. There has been an increase in the number of registered nurses during the year and an increase of 84 in the total personnel. Much training is done in this Branch, both of affiliates and of postgraduate students, the latter coming from Catholic University and Howard University. An inservice training program is carried on, and the employee development program is being expanded.

CLINICAL TRAINING BRANCH

This Branch has the general supervision especially of the psychiatric resident training program but also coordinates the various other training programs which are carried on. One of its functions is the supervision of the Psychotherapy Section, in which we find not only many group and individual psychotherapeutic activities but also dance therapy and psychodrama. This latter form of group psychotherapy was introduced in Saint Elizabeths Hospital over 20 years ago. More recently this hospital, the first public institution to introduce psychodrama, was the first to establish an approved training program.

PSYCHOLOGY BRANCH

This Branch operates in close connection with the various ward services in performing tests, in counseling, in participating in staff conferences, in doing psychotherapy, and in training psychologists. There has been an increased use of psychology on the wards, and a reorganization of the Branch has divided the hospital into five areas for purposes of more efficient service. During the year there was an increase of 51 percent in the patients referred to the Psychology Branch, and nearly 5,000 tests were performed on 1386 persons, mostly but not entirely patients. The speech pathology and audiology activities referred to under the Medical and Surgical Branch are attached primarily to the Psychology Department. During the year 711 audiometric tests were carried out. The psychology staff has been active in lectures and seminars, as well as in training. There have been two residents, nine interns, six field work students and volunteers, and three externs in speech pathology during the year.

RECREATIONAL THERAPY BRANCH

This Branch has been considerably expanded both as to staff and activities. It is active in the school program mentioned above and has engaged in various recreational activities such as dramatics, social activities, writing and speaking, music, and dance.

OCCUPATIONAL THERAPY BRANCH

The activities of the Branch have been numerous, one of those being the educational rehabilitation program, involving 213 patients. There has also been an educational program for the maintenance employees. This has proved very helpful in orienting the maintenance personnel in the proper concepts and methods for working with mental patients, many of whom work with the maintenance areas. The industrial therapy activities carried out under this Branch have to do particularly with the placement of patients in activities which may be helpful to them in securing livelihood after they leave the hospital. The Branch also trains occupational therapy interns.

VOLUNTEER BRANCH

The development of this Branch has been most gratifying from many points of view. During the year an average of 864 volunteers have worked each month, giving a total of 40,000 hours of service. Some of these activities have been carried on through organizations and others by individuals, in many fields of contact with the patient. The value of volunteer service to the community, as well as to the patients, should not be underestimated; these workers carry back to their associates and friends a much sounder conception of a mental hospital than was formerly entertained by their associates.

SOCIAL SERVICE BRANCH

The staff of this Branch has been increased during the year from 25 to 32. A total of 1,817 patients was serviced and 28,500 interviews carried on. The Branch has been very helpful in finding placements for patients; 98, for example, were placed in foster homes and others in the D.C. Village, or referred to the Mental Health Clinic or the Public Assistance Division of the District. Another service was in relocating some of the Indian patients who were referred back to State hospitals in their own States.

BIOMETRICS BRANCH

This Branch has been extremely active and useful during the year. The hospital has been recognized as one of the model reporting areas, being the 29th jurisdiction thus to be recognized. The bills to the District for the care of patients are now being prepared by this Branch. A thoroughgoing statistical system is being set up, and eventually there is every reason to believe that we shall know much more about the facts of the hospital care of mental disorder than has been known in the past.

MEDICAL RECORDS BRANCH

The Medical Records Branch not only files and reviews records but now abstracts them for other hospitals on appropriate request. The need of medical records is sometimes overlooked by physicians, but there is no question about the value of them for reference purposes, studies, and further knowledge concerning patients.

LABORATORY BRANCH

The demands on this Branch continue to increase, but they have been met very well, thanks to a considerable increase in automation. No less than 264,000 tests were carried on during the year, this amounting to almost 30-percent increase. Autopsies came to 45.1 percent of the deaths.

A residency in pathology has been approved, and there are two residents in this program. An isotope laboratory is in operation, and it is planned to do cytological investigations routinely on female patients who are admitted to the hospital, this method being valuable in giving early evidence of cancer of the uterine cervix.

SANITARY ENGINEERING BRANCH

This Branch has operated most effectively on a hospitalwide basis, not only as to insect and rodent control but to food preparation and serving and general housekeeping.

CHAPLAINS BRANCH

This Branch operates under the auspices of the three major faiths, namely, Jewish, Protestant, and Roman Catholic. The patients of all these faiths are served as to worship and pastoral counseling, each new patient being seen very shortly after admission by a clergyman of his own faith. The senior Protestant chaplain reports a considerable increase in the worship services, including two services in the chapel on Sunday mornings, and an increase in the training program with the addition of a third year of clinical pastoral training residency. There were 11 full-time trainees plus 58 part-time trainees during the year including seminarians and community clergy. During the year the members of the Protestant Branch gave no less than 305 addresses and lectures. The senior Protestant chaplain was elected president of the Association of Mental Hospital Chaplains during the year. A director of chaplain studies was added to the staff, who will make studies concerning the various relationships of religion to mental health in a hospital setting.

The Roman Catholic program has likewise been increased, especially as to training. There were six full-time interns during part of the year, and four of them remained all of the year. In addition, seminarians from a number of seminaries have received instruction,

and of the community clergy approximately 79 have received instruction in this section. During the year the senior Catholic chaplain celebrated his 25th Jubilee as a priest.

The Jewish program deals with a much smaller group of patients, but much attention has been given to the worship and festival aspects of their religion. In this field the volunteers have been of inestimable value.

LIBRARY SERVICES

The Services are divided into services to the medical staff and to patients, both of these activities being under the supervision of trained medical librarians. The Medical Library gives service to the medical staff and to other staff members of the hospital in the line of references, bibliographies, and of providing books. The collection of Saint Elizabeths is an excellent one, totaling now about 19,000 volumes with a total of accessions during the year of 1,314. There were 314 periodicals subscribed to. It is unfortunate that some of the other libraries in the area are actually cutting their services, so that interlibrary loans are becoming somewhat more difficult to manage. Space is at a premium, but there will be some relief when the new wings of the Administration Building are completed.

The Patients' Library now numbers 68,000 volumes, with a gain during the year of almost 2,800, much of the latter by gifts. In addition to having the central reading room and storage of books, the patients' librarian keeps active a considerable number of ward libraries and maintains active circulation of books among the wards. The library is also involved in bookbinding, shorthand, and other classes with the assistance of volunteers.

Office of Personnel

During the year the Office of Personnel was made directly responsible to the Office of the Superintendent, partly as a result of the report of the Civil Service Commission inspectors who carried out inspection in the spring. A very active program of recruiting was carried on during the year, somewhat to the disadvantage of some of the other programs. The number of disciplinary actions is increasing substantially, and the requests, not to say demands, from various credit stores occupy a great deal of the attention of the Office. There are now 3,511 positions in the hospital which are filled. One hundred and nineteen summer students were recruited, this being a part of the campaign to interest more young people in possibly entering Government service. The employee development and training program has been substantially expanded during the year. Space is

crowded, but some relief is expected when the wings of the Administration Building are completed.

Division of Administration

The various branches of this Division are essential to the proper operation of the hospital, and during the year they have functioned very effectively. The activities include such things as purchasing, warehousing, the dietary department (which prepared over 7 million meals during the year), registrar's office, maintenance office, laundry, garage, grounds, sewing room, payroll, and patients' funds. The Division has been greatly aided during the year by the services on a part-time basis of a lawyer detailed by the General Counsel's Office of the Department. A new section on management analysis was set up during the year. Construction underway involves the wings of the Administration Building, the Continued Treatment-9 Building due for occupancy about April 1963. Plans for a Rehabilitation Building are being developed. The Anacostia Freeway is being constructed on the hospital grounds; this resulted in the loss of about 15 acres to the hospital.

Needs of the Hospital

The future of the hospital should be clarified at an early moment. It seems clear to all who are familiar with the history of the hospital, its international reputation, and the consistent support which has been given to it by Congress that the founders intended that there should be a national institution to set the pace for the various States in the lines of patient care, training, and research. Saint Elizabeths is in a unique position to do this, yet there are certain forces which appear to be interested in downgrading the institution to that of a District hospital. The hospital has exerted leadership through more than a century, and at this moment, when mental health is securing so much public attention, it would be little short of a tragedy not to emphasize the national goal of an institution, the example of which State and local institutions do not resent. The program already underway of replacing antiquated facilities with new should be continued, and it is to be expected that the advancing needs of psychiatry and the correlative advancing needs of personnel and equipment will be recognized by the Bureau of the Budget and by the Congress. The organic act passed in 1855 set forth the aims of the hospital as the "most humane care and the most enlightened curative treatment" of the mentally ill. Toward these aims the hospital has always striven and will continue to do so in the future.

Table 1.—Patients, admissions, and discharges, fiscal years 1935–62

Fiscal year	Average number of patients		Admissions	Discharges	Discharges as percent of admissions	Deaths
	On rolls	In hospital				
1935–39.....	5,624	-----	987	474	48	296
1940–44.....	6,849	-----	1,885	1,295	69	387
1945–49.....	6,832	-----	1,815	1,477	81	431
1950–54.....	7,175	6,896	1,481	920	62	440
1955–59.....	7,458	7,039	1,501	951	63	524
1950.....	6,897	6,587	1,648	960	58	495
1951.....	7,053	6,783	1,412	928	66	424
1952.....	7,172	6,915	1,438	814	57	431
1953.....	7,361	7,079	1,524	977	64	436
1954.....	7,392	7,117	1,385	921	66	416
1955.....	7,461	7,216	1,349	748	55	502
1956.....	7,438	7,120	1,327	884	67	600
1957.....	7,413	6,994	1,615	1,014	63	507
1958.....	7,466	6,965	1,605	1,076	67	532
1959.....	7,512	6,900	1,607	1,034	64	479
1960.....	7,691	6,983	1,894	1,101	58	504
1961.....	7,933	6,976	1,981	1,395	70	440
1962.....	7,940	6,838	1,2,024	1,649	81	484

¹ Differs slightly from comparable numbers for earlier years in that the earlier figures include "paper" discharges and readmissions made in order to change legal categories.

Table 2.—Patients on the rolls, by status and by sex, time since admission, ethnic group, and age, June 30, 1962

Sex, time since admission, ethnic group, and age	Patients on rolls, total	Resident patients ¹			On vacation	On convalescent leave	On unauthorized leave
		Total	In hospital	On temporary visit			
Total.....	7,883	6,894	6,617	277	83	837	69
Males.....	3,987	3,587	3,446	141	34	314	52
Females.....	3,896	3,307	3,171	136	49	523	17
<i>Time since admissions</i>							
Less than 6 months.....	773	686	625	61	5	74	8
6–11 months.....	474	326	311	15	6	133	9
1 year.....	780	562	529	33	18	187	13
2 years.....	587	439	406	33	13	120	15
3–4 years.....	719	576	539	37	19	111	13
5–9 years.....	980	866	824	42	9	100	5
10–19 years.....	1,574	1,483	1,439	44	10	76	5
20 years and over.....	1,996	1,956	1,944	12	3	36	1
Median time since admission (years).....	8	10	11	3	3	2	2
<i>Ethnic group</i>							
White.....	4,160	3,765	3,618	147	43	322	30
Nonwhite.....	3,723	3,129	2,999	130	40	515	39
<i>Age (years)</i>							
Less than 15.....	15	11	10	1	0	4	0
15–17.....	36	24	22	2	0	11	1
18–24.....	267	219	194	25	3	42	3
25–34.....	854	650	587	63	16	160	28
35–44.....	1,304	1,039	958	81	21	227	17
45–54.....	1,508	1,284	1,223	61	20	193	11
55–64.....	1,623	1,470	1,445	25	12	136	5
65–74.....	1,172	1,119	1,106	13	7	42	4
75–84.....	831	807	801	6	4	20	0
85 and over.....	273	271	271	0	0	2	0
Median age.....	55	56	57	41	46	44	36

¹ Resident patient status should not be confused with the D.C. resident legal category. The former is defined as patients in the hospital plus those on temporary visit.

Table 3.—*Movement of patients on the rolls, by sex, time since admission, ethnic group, and age, fiscal year 1962*

Sex, time since admission, ethnic group, and age	Patients on rolls June 30, 1961	Admissions	Discharges	Deaths	Patients on rolls June 30, 1962
Total	7,992	2,024	1,649	484	7,883
Males	4,047	1,129	962	233	3,981
Females	3,945	895	687	251	3,902
<i>Time from admission to June 30, 1962</i>					
Less than 6 months		1,080	290	19	773
6-11 months		944	402	65	474
1 year			472	77	780
2 years			165	50	587
3-4 years			117	52	719
5-9 years			86	71	980
10-19 years			72	64	1,574
20 years and over			45	86	1,996
<i>Ethnic group</i>					
White	4,244	1,036	836	284	4,160
Nonwhite	3,748	988	813	200	3,723
<i>Age (years) ¹</i>					
Less than 15	16	12	20	0	15
15-24	280	235	150	3	303
25-34	873	446	393	5	854
35-44	1,345	434	447	19	1,304
45-54	1,610	303	323	29	1,508
55-64	1,608	192	171	69	1,623
65-74	1,197	175	104	109	1,172
75-84	799	158	35	155	831
85 and over	264	69	6	95	273
Median age	54	42	41	75	55

¹For individual age groups, the number of patients at the beginning of the year plus admissions minus discharges and deaths do not equal the number of patients at the end of the year. This is because some patients age from one group into the next during the year. For example, 7 patients who were less than 15 years of age on June 30, 1961, became 15 years old by June 30, 1962.

Table 4.—Patients on the rolls by status and legal category, June 30, 1962

Legal category	Patients on rolls, total	Resident patients ¹			On vacation	On convalescent leave	On unauthorized leave
		Total	In hospital	On temporary visit			
Total.....	7,883	6,894	6,617	277	83	837	69
Reimbursable.....	6,228	5,378	5,144	234	77	741	32
D.C. resident.....	5,382	4,714	4,534	180	58	587	23
D.C. voluntary.....	310	187	158	29	11	106	6
Veterans' Administration.....	411	394	341	23	5	39	3
U.S. Nationals from aboard.....	59	55	54	1	1	3	0
U.S. Soldiers Home.....	41	35	34	1	0	6	0
Indians (PHS).....	21	21	21	0	0	0	0
Other reimbursable.....	4	2	2	0	2	0	0
Nonreimbursable.....	1,655	1,516	1,473	43	6	96	37
Total, excluding prisoners.....	803	757	731	26	4	42	0
D.C. nonresident.....	313	275	261	14	2	36	0
Military.....	252	250	248	2	0	2	0
Virgin Islands.....	134	132	132	0	1	1	0
Federal reservation.....	36	33	26	7	1	2	0
Public Health Service.....	17	17	16	1	0	0	0
Coast Guard.....	14	14	14	0	0	0	0
Canal zone.....	15	15	15	0	0	0	0
Other, excluding prisoners.....	22	21	19	2	0	1	0
Prisoners.....	852	759	742	17	2	54	37
D.C. total.....	782	689	672	17	2	54	37
For examination.....	87	81	81	0	0	2	4
Mentally incompetent.....	248	238	235	3	0	6	4
Not guilty by reason of insanity.....	296	240	233	7	2	32	22
Under sentence.....	90	89	89	0	0	0	1
Sex psychopath.....	61	41	34	7	0	14	6
U.S. prisoners.....	49	49	49	0	0	0	0
Military prisoners.....	21	21	21	0	0	0	0

¹ Resident patient status should not be confused with D.C. resident legal category. The former is defined as patients in the hospital plus those on temporary visit.

Table 5.—Movement of patients on the rolls by legal category, fiscal year 1962

Legal category	Patients on rolls, June 30, 1961	Admissions	Discharges	Deaths	Net changes in legal category	Patients on rolls, June 30, 1962
Total.....	7,992	2,024	1,649	484	-----	7,883
Reimbursable.....	6,265	1,432	948	432	-89	6,228
D.C. Resident.....	5,464	1,213	618	401	-276	5,382
D.C. voluntary.....	292	192	227	10	+63	310
Veterans' Administration.....	406	12	58	16	+67	411
U.S. Nationals from abroad.....	(¹)	3	1	1	+58	59
U.S. Soldiers Home.....	51	7	15	3	+1	41
Indians (PHS).....	45	0	23	1	0	21
Other reimbursable.....	7	5	6	0	-2	4
Nonreimbursable.....	1,727	592	701	52	+89	1,655
Total, excluding prisoners.....	889	186	385	38	+151	803
D.C. nonresident.....	313	0	248	14	+262	313
Military.....	272	0	7	12	-1	252
Virgin Islands.....	138	4	3	5	0	134
Canadian insane.....	51	0	0	0	-51	(¹)
Federal reservations.....	37	83	75	3	-6	36
Public Health Service.....	28	2	12	2	+1	17
Coast Guard.....	14	0	0	0	0	14
Canal Zone.....	16	0	0	1	0	15
Foreign Service (Employees).....	10	0	4	0	-6	(¹)
Other, excluding prisoners.....	10	97	36	1	-48	22
Prisoners.....	838	406	316	14	-62	852
D.C. total.....	786	364	295	13	-60	782
For examination.....	342	{ 188	146	2	{ 0	{ 87
Mentally incompetent.....		53	91	9		248
Not guilty by reason of insanity.....	229	79	23	1	+12	296
Under sentence.....	151	39	27	1	-72	90
Sex psychopath.....	64	5	8	0	0	61
U.S. prisoners.....	30	42	21	0	-2	49
Military prisoners.....	22	0	0	1	0	21

¹ Two categories, Canadian Insane and Foreign Service (Employees), were discontinued effective November 1961 and January 1962 respectively. Patients in these categories were transferred to the new Category U.S. Nationals from Abroad.

Table 6.—Discharges by status from which discharged and by condition, environment, and employment, fiscal year 1962

Legal category	Total	From resident patient status ¹			From vacation	From convalescent leave	From unauthorized leave
		Total	Direct from hospital	From temporary visit			
Total.....	1,649	954	926	28	35	572	88
<i>Condition or type</i>							
Medical discharges.....	973	361	342	19	31	533	48
Condition on discharge:							
Recovered.....	60	19	17	2	1	40	0
Socially recovered.....	604	143	131	12	24	413	24
Improved.....	233	138	133	5	5	77	13
Unimproved.....	68	53	53	0	1	3	11
No mental disorder.....	8	8	8	0	0	0	0
Administrative discharges.....	676	593	584	9	4	39	40
Type of discharge:							
Against medical advice.....	72	57	56	1	0	1	14
To legal or police authorities.....	224	224	224	0	0	0	0
To home State or country.....	80	77	77	0	0	2	1
To VA hospital.....	37	36	36	0	0	1	0
Expiration of limited stay, court order, for admission to private hospital, etc.....	263	199	191	8	4	35	25
<i>Environment</i>							
Lives alone.....	194	78	74	4	4	95	17
With spouse.....	265	109	103	6	6	144	6
With relatives (not spouse).....	426	217	202	15	13	184	12
With others.....	63	32	31	1	0	31	0
In foster-care home.....	10	0	0	0	0	10	0
In D.C. Village.....	34	3	3	0	0	31	0
In other home for aged, nursing, or convalescent home.....	19	14	14	0	0	4	1
In inpatient psychiatric institution.....	184	167	167	0	2	10	5
In penal institution.....	235	234	234	0	0	1	0
In other institution.....	54	38	38	0	1	14	1
Unknown environment.....	165	62	60	2	9	48	46
<i>Employment</i>							
Full time.....	244	67	62	5	7	167	3
Part time or intermittent.....	40	14	14	0	0	25	1
Not employed.....	1,079	757	738	19	13	277	32
Unknown employment.....	286	116	112	4	15	103	52

¹ Resident patient status should not be confused with D.C. resident legal category. The former is defined as patients in the hospital plus those on temporary visit.

American Printing House for the Blind

AS THE OFFICIAL schoolbook printery for the blind in the United States, one of the principal functions of the American Printing House for the Blind, in Louisville, Ky., is the provision of special educational books and supplies for the blind school children throughout the country through the Federal act "To Promote the Education of the Blind." This act, originally passed in 1879, authorizes an annual appropriation to the Printing House for this purpose. Allocations of books and materials are made on a per capita basis. Only those pupils may be registered whose vision comes within the accepted definition of blindness as follows: "Central visual acuity of 20/200 or less in the better eye with correcting glasses, or a peripheral field so contracted that the widest diameter of such field subtends an angular distance no greater than 20 degrees."

The Printing House maintains large catalogs of Braille books, Talking Books, recorded tapes, Braille music publications, large-type texts, and tangible apparatus. A rich collection of educational material is thereby provided for the kindergarten through the high school grades. A total of 7,706 blind pupils was enrolled through public educational institutions for the blind and 8,267 through State departments of education—a total of 15,973 blind pupils being served by the Printing House—for the fiscal year ending June 30, 1962.

During the 1962 fiscal year, Braille books, educational periodicals, and music made up approximately 49.8 percent of the materials required by the schools; Braille slates, Braillewriters, maps, and other mechanical devices about 15.7 percent; Talking Books about 2.5 percent; recorded educational tapes about 0.5 percent; and large-type books about 29 percent. Approximately 2.5 percent was used for miscellaneous items.

American Printing House for the Blind

As this illustrious schoolhouse primary for the blind in the United States, one of the principal fundaments of the American Printing House for the Blind, in Washington, D.C., is the provision of special educational books and supplies for the blind school children throughout the country through the Federal act "To Promote the Education of the Blind." This act, originally passed in 1878, authorizes an annual appropriation to the Printing House for this purpose. Allocation of books and materials are made on a per capita basis. Only those pupils may be retained whose vision comes within the accepted definition of blindness as follows: "Central visual acuity of 20/200 or less in the better eye with correcting glasses, or a peripheral field so contracted that the widest diameter of such field includes an angular distance no greater than 35 degrees."

The Printing House maintains large catalogs of Braille books, Talking Books, recorded tapes, Braille music publications, large-type text, and graphic apparatus. A rich collection of educational materials is thereby provided for the kindergarten through the high school grades. A total of 7,700 blind pupils was enrolled through public school systems nationwide for the blind and 8,207 through State departmental institutions for the blind and 16,813 blind pupils being served by the Printing House—for the fiscal year ending June 30, 1967.

During the 1966 fiscal year, Braille books, educational materials, and tapes made up approximately 43.8 percent of the materials supplied by the schools; Braille tapes, Braille writers, tapes, and other educational devices about 14.7 percent; Talking Books about 5.5 percent; recorded educational tapes about 0.5 percent; and large-type books about 30 percent. Approximately 2.5 percent was used for miscellaneous items.

Gallaudet College

GALLAUDET COLLEGE, established in 1857, is the only institution of higher learning in the world devoted exclusively to the education of the deaf. It is accredited by the Middle States Association of Colleges and Secondary Schools. Public Law 420, 83d Congress, approved June 18, 1954, clearly defines its status as a college, its relationship with the Federal Government and its responsibility to provide education and training to deaf persons and otherwise to further the education of the deaf.

The college's principal activity is a 4-year undergraduate course of studies leading to the B.A. and B.S. degrees. In addition, Gallaudet offers a 1-year college preparatory course. Deaf children of nursery age are taught in the Hearing and Speech Center. Elementary and secondary education for deaf children of the District of Columbia and adjacent States is provided by the Kendall School, a laboratory school serving the college's Department of Education. This department, established in 1891, trains graduate students, both deaf and hearing, for positions as teachers and administrators in schools from 48 States, the District of Columbia, and 9 foreign countries. Enrollment in the Kendall School was 92, of which 80 came from the District of Columbia.

The editorial offices of "dsh Abstracts" and of the "American Annals of the Deaf" are on the Gallaudet campus.

Howard University

HOWARD UNIVERSITY, located in the District of Columbia, was chartered by an act of Congress, dated March 2, 1867. The university consists of 10 schools and colleges, offering programs of higher education on the undergraduate, graduate and professional levels. Undergraduate students are registered in the college of liberal arts; graduate students seeking the master's and doctor of philosophy degrees are registered in the graduate school; professional students are registered in the colleges of medicine, dentistry, pharmacy, fine arts (including the school of music and the departments of art and drama) and the schools of engineering and architecture, social work, law, and religion. (The school of religion receives no support from Federal funds.)

The educational program of the university is conducted in keeping with the democratic purposes of land-grant colleges and State universities, with the low tuition fees and living costs which characterize these institutions, and with an educational program resting upon and permeated by the content and spirit of a general or liberal education. The university admits students of both sexes, from every race, creed, and national origin, but it accepts and undertakes to discharge a special responsibility for the admission and training of Negro students.

ENROLLMENT OF STUDENTS

During the school year 1961-62, the university served a total of 8,704 students as follows: 6,338 during the regular academic year and 2,366 in the summer session of 1961. The total net enrollment, excluding all duplicates, was 7,118 distributed in the 10 schools and colleges as follows: liberal arts, 3,552; graduate school, 805; engineering and architecture, 778; fine arts, 375; social work, 126; medicine, 377; dentistry, 726; pharmacy, 177; law, 128; and religion, 74. The enroll-

ment of Negro professional students at Howard continues to be greater than in all the public-supported universities in all the Southern States.

GEOGRAPHICAL DISTRIBUTION OF STUDENTS

Of the total of 6,699 students seeking degrees, 5,762 or 86 percent came from the States and the District of Columbia, while 937 students or 14 percent came from outside the continental United States including 2 possessions of the United States, 58 foreign countries, and 13 island possessions of the British, French, and Dutch West Indies. The percentage of foreign student enrollment to the total student enrollment at the university continues to be the highest in any American university.

The students from the United States were distributed as follows: New England States, 2 percent; Middle Atlantic States, 17 percent; East North Central States, 6 percent; West North Central States, 2 percent; Mountain States, 0.5 percent; South Atlantic States, 58 percent; East South Central States, 7.5 percent; West South Central States, 6 percent; and Pacific States, 1 percent.

The 937 students from outside the continental United States came from 58 foreign countries including Greenland, Canada, and Mexico, 5 countries in the Caribbean area, 3 countries in South America, 9 countries in Europe, 17 countries in Africa, 12 countries in the Near and Middle East, and 9 countries in the Far East. In addition, there were students from Puerto Rico, the Virgin Islands, and 13 of the British, French, and Dutch possessions in the West Indies.

VETERANS

During the 1961-62 school year, the student enrollment included 291 veterans and dependents of deceased veterans receiving allowances from the Veterans' Administration. One hundred eighty-nine of them were enrolled in the four undergraduate divisions of the university, and 102 were enrolled in the graduate and advanced professional schools. The number of enrolled veterans is steadily decreasing, and unless there is new legislation providing benefits for "peacetime veterans," there will be few veterans who have educational benefits still available to them after the 1962-63 school year.

ARMY AND AIR FORCE ROTC

Army ROTC.—There were 610 students enrolled in Army ROTC during the 1961-62 school year. Of this number, 284 were in the first-year course, 245 were in the second year, 44 were in the third year, and 37 were in the fourth year. There were 33 students commissioned as reserve officers in the Army during the year.

Air Force ROTC.—A total of 537 students was enrolled in Air Force ROTC. Of this number, 303 were in the first-year course, 201 were in the second year, 19 were in the third year, and 14 were in the

fourth year. During the year, 8 students were commissioned as reserve officers in the Air Force.

THE FACULTY

There were 801 teachers serving the university during the school year. Of this number, there were 431 full-time teachers, while 370 were part-time. The full-time equivalent of the teaching staff was 533.6. Of this full-time equivalent, 472.7 were teaching in the rank of instructor and above.

The university continues, as always, to seek for its faculty the most able persons who are selected on the basis of their competence and character, without regard to sex, race, color, creed, or national origin. It is to be noted, however, that the Howard University faculty has always included the largest group of Negro teachers and scholars at the university level found anywhere in the United States. Indeed, many of the most outstanding Negroes in public life have served at Howard University at some time during the course of their careers. Among such persons were the founder and operator of the first blood plasma bank, a governor of an American possession, an under secretary of the United Nations, and a member of the United States Court of Appeals.

The faculty continues to remain active in making a valuable contribution to education and the advancement of knowledge through significant research and scholarly publications.

GRADUATES

During the 1961-62 school year, there were 731 graduates from the 10 schools and colleges. These graduates came from 36 States, the District of Columbia, Puerto Rico, the Virgin Islands, 22 foreign countries, and 7 island possessions of the British, French, and Dutch West Indies. The 22 foreign countries included Greenland, Haiti, Cuba, British Guiana, Panama, 4 countries in Europe, 4 countries in Africa, 3 countries in the Middle East, and 6 countries in the Far East.

The 731 graduates were distributed among the 10 schools and colleges as follows: liberal arts, 311; engineering and architecture, 93; fine arts, 19; the graduate school, 68; social work, 43; medicine, 72; dentistry, 57; dental hygiene, 11; pharmacy, 28; law, 19; and religion, 10. In addition, honorary degrees were conferred upon three persons.

From the date of its establishment in 1867, Howard has graduated 23,174 persons. The great majority of these graduates have been Negroes. Throughout its 95-year history, Howard has been a pioneer in providing Negroes with educational opportunities which were either not available or offered in only a limited amount elsewhere. Among institutions in which Negro students are in a majority, the university

still stands as the only one affording a complex system of undergraduate, graduate, and professional training.

The largest number of graduates has entered the field of teaching, especially in the Southern States. In the field of medicine, there have been 3,239 graduates; 2,547 graduates have gone into dentistry and dental hygiene; 2,452 have entered the field of law; 822 have entered the ministry; 954 have gone into the fields of engineering and architecture; and 571 graduates have gone into social work. Numerous graduates of the university have been engaged in government activities, not only in the United States but also in many countries abroad.

PUBLIC SERVICE AT HOME AND OVERSEAS

Throughout the history of Howard, teachers and students have rendered valuable and distinguished service to government in the United States and overseas. This we view as being intimately related to the functions of a university—teaching, research, and public service.

During the 1961-62 school year, the university systematically undertook programs to aid in the improvement and development of the local community. As an illustration of this, the Vice-President for Special Projects provided leadership in the establishment of an interdisciplinary program involving social work, sociology, religion, psychology, medicine, government, law, and other departments, which, together with the churches in the 49th census tract in Washington, are giving guidance and assistance to the people in that area in solving their most pressing social, economic, and cultural problems. A more limited program has also been initiated along similar lines in a second neighborhood area in the community.

Early in the summer of 1962, Howard undertook an extensive Peace Corps training project which involved the training of volunteers going to Niger, Senegal, Togo, Sierra Leone, and Cyprus. In providing training for programs in five countries simultaneously, Howard had a greater number and variety of Peace Corps training programs at one time than any other institution in the country.

Many members of the faculties gave significant public service as individuals. A professor of law was on leave of absence to serve as chairman of the Public Utilities Commission of the District of Columbia, a professor of sociology was appointed to the Advisory Board of the National Capital Transportation Agency, an associate professor of government was appointed to the District of Columbia Board of Elections, and a professor of preventive medicine and public health was presented a "community service award" by the Health and Welfare Council of the National Capital Area. These examples are illustrative of the service being given by many other members of the staff.

In 1961-62 as in the past, there were teachers from Howard working and studying abroad. An associate professor of government, with the aid of a Rockefeller grant, was engaged in studying guerilla warfare in Laos and Viet Nam; a professor of English was working for the United States Information Agency in West Germany; the librarian of the university served as an adviser at the library of the University of Rangoon in Burma; the director of recording was on leave to serve as registrar in the establishment of a new educational institution in Sukka, Nigeria; and a professor of anatomy was working in India on the staff of the Agency for International Development.

Members of the staff were studying and teaching abroad, including one in Japan and another in Italy. There were many students traveling and studying in other countries, including 18 members of the university choir who participated in a choral workshop in Puerto Rico.

It is readily recognizable, therefore, that students and members of the staff are continuing the Howard tradition of significant service to people both at home and elsewhere.

THE BUILDING PROGRAM

During the school year 1961-62, construction proceeded on the new home economics building, which was expected to be ready for use in the fall of 1962. Work was begun on the construction of a new building providing for the physical education programs for men. The new physical education building will contain about 113,000 square feet and will include the following general categories of space: a gymnasium area for 2,500 spectators; a gymnasium for regular program work; two special exercise rooms; a standard intercollegiate-size swimming pool with seating for approximately 400 spectators; classrooms and offices; locker space and shower rooms; and equipment storage and other related spaces.

Plans and specifications were in preparation for the construction of a proposed new classroom building for the college of liberal arts and a new women's residence hall. Construction is expected to begin near the end of this school year. In addition, the university leased a facility to serve as a warehouse service building.

The university began a program of intensive study of its educational and physical plant needs for a number of decades in the future. The present master development program was completed in 1951. Its basis, however, rests essentially on a program which was designed in 1931. In view of the severe limitations placed upon its growth by the present limited campus, the university is endeavoring to make an even more intensive use of its present land resources, as well as exploring ways of expanding its campus area.

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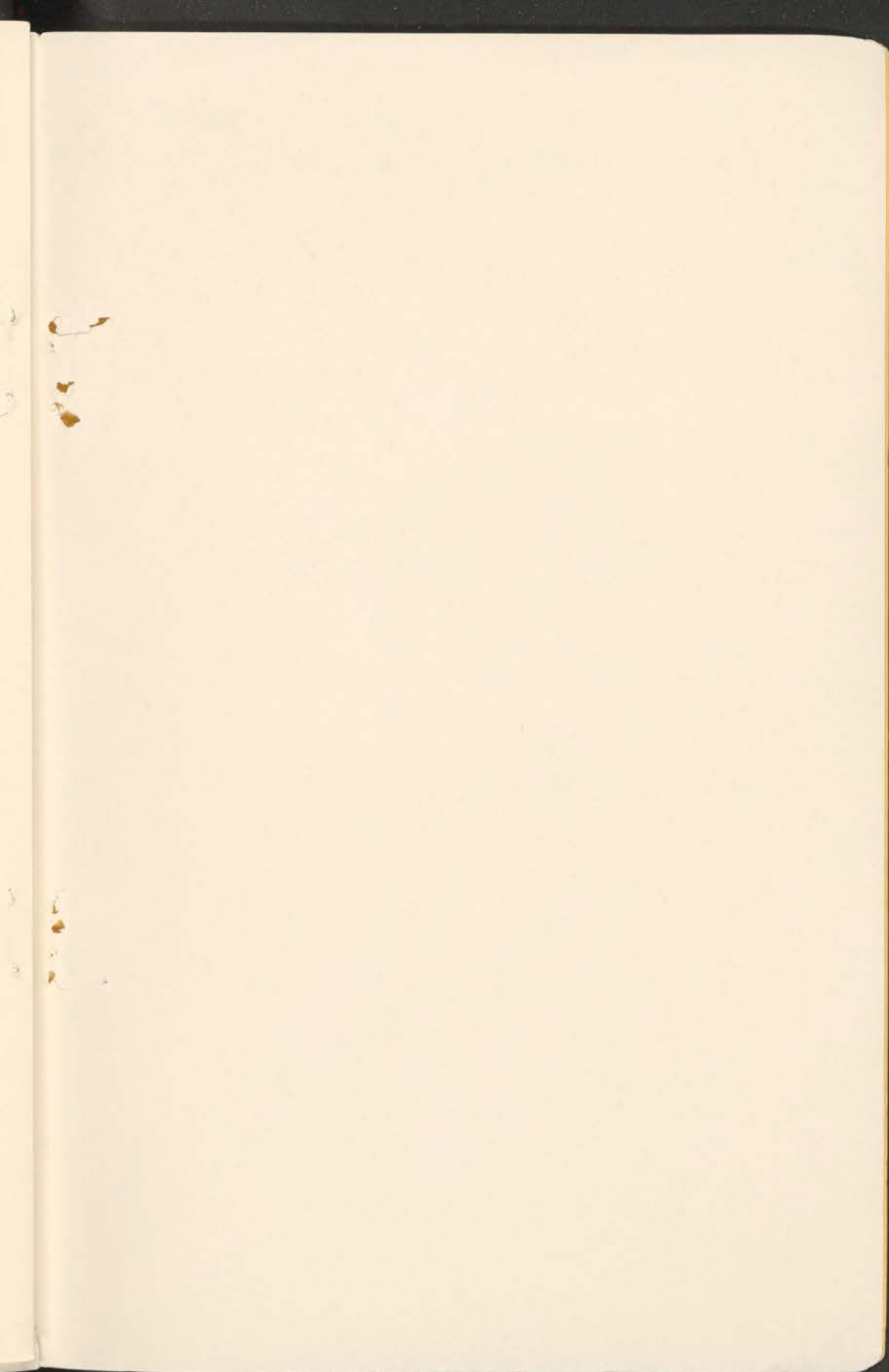
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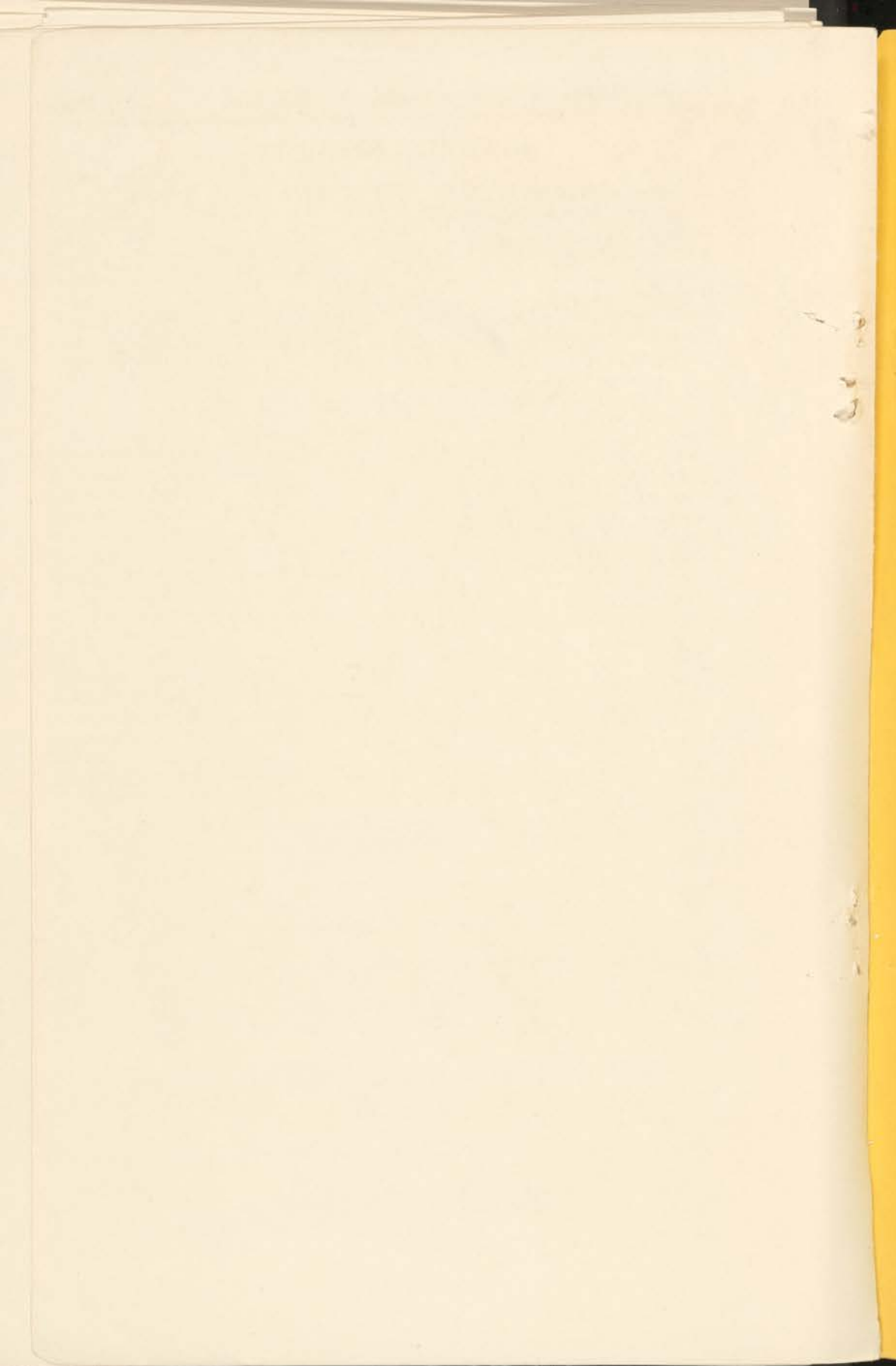
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