

The seal of the U.S. Department of Health, Education, and Welfare is a circular emblem. It features an eagle with spread wings perched atop a shield. Inside the shield is a caduceus (a staff with two snakes entwined and wings at the top) superimposed over an open book. A banner at the bottom of the shield contains the Latin motto "SPES ANCHORA VITAE". The outer ring of the seal contains the text "DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE" at the top and "U.S.A." at the bottom.

Annual Report

U.S. DEPARTMENT OF

HEALTH, EDUCATION, AND WELFARE

1955

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

As of June 30, 1955

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MARTHA M. ELIOT *Chief, Children's Bureau.*

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W. PALMER DEARING *Deputy Surgeon General.*
JACK MASUR *Chief, Bureau of Medical Services.*
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the Blind.*
LEONARD M. ELSTAD *President, Gallaudet College.*
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THE UNIVERSITY OF CHICAGO
 DIVISION OF THE PHYSICAL SCIENCES
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 5712 S. DICKINSON DRIVE
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TO THE EDITOR
 OF THE JOURNAL OF POLYMER SCIENCE

RE: POLYMER LETTERS

Dear Sir:

I am writing to you regarding the article by J. H. Duerksen and J. H. Duerksen, "The Effect of Temperature on the Rate of Polymerization of Styrene in the Presence of Benzoyl Peroxide," published in the March 1968 issue of the Journal of Polymer Science.

The authors report that the rate of polymerization of styrene in the presence of benzoyl peroxide increases with increasing temperature. This is in contrast to the results reported by other workers, who have found that the rate of polymerization decreases with increasing temperature.

The authors attribute this increase in rate to the formation of a more active radical species at higher temperatures. They suggest that this species is formed by the reaction of benzoyl peroxide with styrene.

I am interested in this work because it provides a new explanation for the increase in rate of polymerization of styrene in the presence of benzoyl peroxide at higher temperatures. I am also interested in the authors' suggestion that this species is formed by the reaction of benzoyl peroxide with styrene.

I am writing to you to request that you publish a reply to this article in the next issue of the Journal of Polymer Science. I am sure that your readers will be interested in this work.

Sincerely,
 J. H. Duerksen

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Letter of Transmittal

DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE.

Washington, D. C., December 1, 1955.

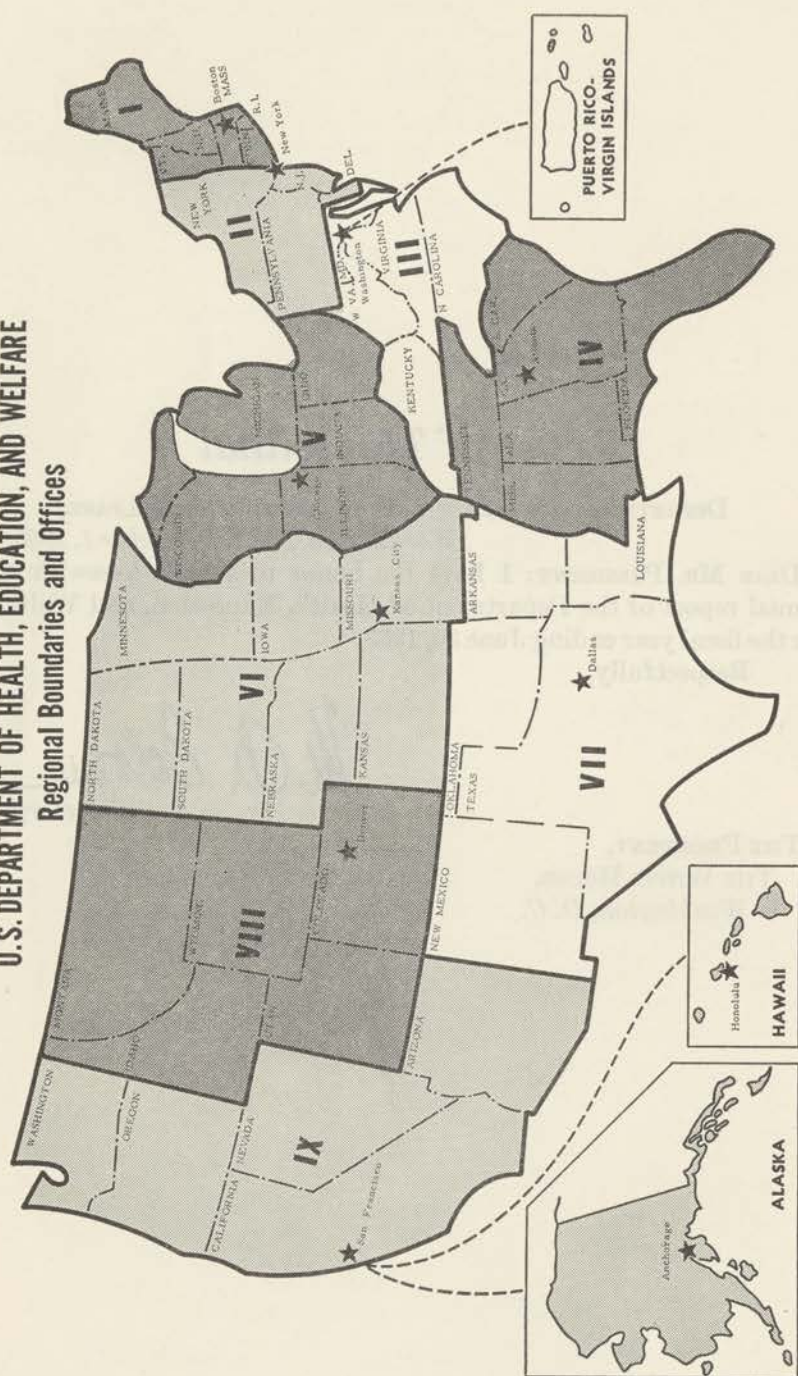
DEAR MR. PRESIDENT: I have the honor to submit herewith the annual report of the Department of Health, Education, and Welfare for the fiscal year ending June 30, 1955.

Respectfully,

W. B. Tolson
Secretary.

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

U.S. DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE Regional Boundaries and Offices



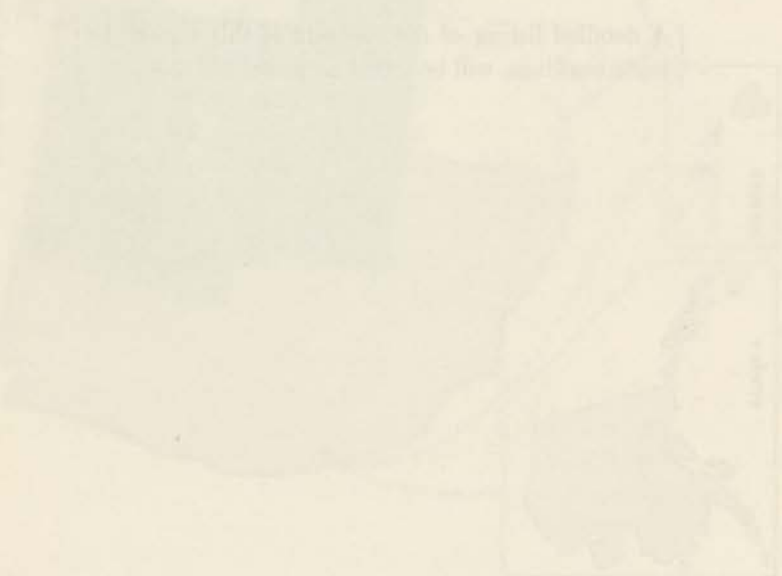
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The Secretary's Report

"Government must work to stabilize the buying power of the dollar, else the value of the pension, the insurance policy and the savings bond is eroded away.

"Government, through social security and by fostering applicable insurance plans, must help protect the individual against hardship and help free his mind from anxiety.

"Government must use its full powers to protect its citizens from depression, unemployment and economic distress.

"Government, my friends, must have a heart as well as a head. It must encourage, guide, backstop and supplement—but never dominate or attempt to regiment our people."

THIS PASSAGE from an address by President Eisenhower admirably sums up the general philosophy under which the Department of Health, Education, and Welfare sought to carry out its responsibilities during the fiscal year 1955—the second full year in the history of the Department.

It is the concept, in fact, which led to the submittal to Congress in April 1953 of the plan for the founding of the Department—the first to be submitted by President Eisenhower for reorganization of the executive branch of the Federal Government.

Establishment of the Department gave appropriate recognition to the increasing importance which the American people place on better health, improved education, and greater individual security—and to the concern of this administration that these factors receive continuing attention throughout the Nation.

Throughout the year, the Department has kept constantly in mind the concept of encouragement, guidance, and supplementation which

the President describes as the proper role of the Federal Government in these fields. The fact that the Department's programs deal so intimately with the close and varying personal concerns of the individual and his family gives cardinal importance to the avoidance of any act or attitude that might lead to the domination or regimentation of the individual against which the President sounds a warning.

The opening pages of this annual report deal principally with those events of the fiscal year 1955 which are departmentwide in scope or are notably significant in the history of the Department. The reports of the five major units which make up the Department—the Public Health Service, the Social Security Administration, the Office of Education, the Food and Drug Administration, and the Office of Vocational Rehabilitation—as well as other related agencies and units will be found in subsequent pages.

It is appropriate here, however, to describe the major developments of the year which have special importance to the national welfare. In certain instances, moreover, these illustrate the philosophy of the President, set forth above. In essence, taken together, these represent the highlights of a continuing record of achievement on behalf of the health, education, and general welfare of the people of the United States.

Progress in Health

The health of the American people continues to be good. Only a few of the health statistics submitted by the States to the Public Health Service of the Department and gathered by the Service itself need be cited here.

The general death rate from all causes during 1954, the latest period for which figures were available when this report was prepared, was 9.2 per 1,000 of population, representing a slight decline over the previous year. Maternal deaths of only 5.3 per 10,000 live births and infant mortality of 26.6 per 1,000 live births also showed a decrease in 1954. This is the 18th successive year in which the infant death rate continued to decline, one yardstick of the remarkable progress in curative and preventive medicine.

The recent improvements in health are the work of many thousands of individuals and many hundreds of institutions—practicing physicians; scientists and their aides; the staff members of hospitals and research institutions, including those of private industry; the great voluntary health organizations which the American people generously support; and public health agencies in the States and communities.

Illustrative of some of the challenges that lie ahead for American medicine and science is the fact that cancer and diseases of the heart

and circulatory system were responsible for more than two-thirds of all deaths in 1954.

The Federal Government plays an increasingly important role, both in the extension, by the authority of the Congress, of its own research and control activities and through its grants-in-aid to States, private hospitals and laboratories, and individuals. There has been some variation, over the years, in the degree and scope of the Federal role, determined, in part, by the relative importance of various health projects and the capacities of both Federal and non-Federal research programs to move forward with maximum productivity. There has been occasional and understandable difference of opinion on these decisions. The total effect, however, of Federal participation in medical research and in the control of illness has been very substantial advancement of the frontiers of medical knowledge and improvement of mankind's armament for the ceaseless war against disease and disability.

Public Health Service.—Among notable advances in research conducted at the Public Health Service's National Institutes of Health during the fiscal year were extensive field trials which demonstrate the effectiveness of a cytologic test to detect early cancer of the cervix on a mass basis. New knowledge was obtained regarding the cause and prevention of retrolental fibroplasia, a blinding eye disease which has been affecting 50 percent of the smaller premature infants.

Studies of tissue culture which culminated during the year included the discovery of a previously unknown group of viruses which affect the respiratory system. This discovery has importance for future research on infections of the upper respiratory tract, including the common cold. Development of a multivirus vaccine for many of these ailments by scientists of the National Institutes of Health made considerable progress during the year.

Research activities in air pollution were expanded this year at the Robert A. Taft Sanitary Engineering Center in Cincinnati, Ohio, a focal point for research on the relationship of the environment to human health. An Ad Hoc Interdepartmental Committee on Air Pollution (representing the Departments of Agriculture; Defense; Health, Education, and Welfare; and Interior; the Atomic Energy Commission; and the National Science Foundation) was established at the invitation of the Secretary of Health, Education, and Welfare. It has recommended a Federal program of research and technical services on air-pollution problems.

In 1954 Congress broadened the local-State-Federal hospital survey and construction program to include diagnostic and treatment centers, chronic-disease hospitals, rehabilitation centers, and nursing homes. At the close of the 1955 fiscal year, 28 States had applied for

survey and planning funds under this program. Seven States had completed revision of the statewide plans required under the law. Construction project applications, which can be made only after surveys have been completed, had been received from two States.¹

In August 1954, President Eisenhower approved a bill authorizing transfer of Indian health activities from the Department of the Interior to the Department of Health, Education, and Welfare, effective July 1, 1955. During the fiscal year, the Public Health Service worked closely with the Bureau of Indian Affairs in anticipation of the transfer of this program, which involved some 3,400 employees and real property valued at \$40 million. A new Division of Indian Health was established in the Public Health Service to administer this program.

The development by Dr. Jonas Salk of a vaccine effective against paralytic poliomyelitis was among the most dramatic accomplishments of American science during the year. This remarkable achievement on behalf of the children of the Nation was signalized by the Congress by a substantial monetary award to Dr. Salk and authorization of a medal to memorialize his discovery. In April 1955, Dr. Salk and Mr. Basil O'Connor, president of the National Foundation for Infantile Paralysis, which had supported the work of Dr. Salk and his associates, were awarded special citations by the President.

Licenses for the manufacture of the new vaccine were granted six pharmaceutical concerns on April 12, 1955. It was apparent, however, that the vaccine would remain in short supply throughout the poliomyelitis season. Acting on the direction of the President, the Secretary began to develop plans for assuring an equitable distribution of the vaccine that was available. The plans were developed in consultation with representatives of the governors of the States, the medical and health professions, the pharmaceutical and drug industry, public interest groups, and others concerned with the problem.

The Secretary recommended a system of voluntary allocation and distribution of the vaccine while it remained in short supply. This recommendation was based on the conviction that a voluntary plan was the best way to assure an orderly and equitable sharing in the benefits of this medical discovery for the entire Nation. The Secretary also recommended the creation of a national advisory committee to advise on matters associated with the distribution of the vaccine, including the establishment of priority groups. These recommendations were accepted by the President. A National Advisory Committee on Poliomyelitis Vaccine was appointed by the Secretary, under the chairmanship of Dr. Chester Scott Keefer, Special Assistant to the Secretary for Health and Medical Affairs. Shortly after the close

¹ On July 8, 1955, the first project was approved under the new program—a nursing home for Pinal County, Florence, Arizona.

of the fiscal year, at the request of the President, the Congress authorized the expenditure of \$30 million for grants to the States for purchase of the vaccine.

Additional details on the distribution program, as well as the activities of the Public Health Service with regard to safety and effectiveness of the vaccine, are contained in the report of the Public Health Service.

The Food and Drug Administration, whose duties are fundamentally concerned with health, was subject to thorough study during the latter part of the fiscal year by 14 distinguished members of a Citizens Advisory Committee authorized by the 83d Congress. The two main conclusions and recommendations of the Citizens Advisory Committee, delivered to the Secretary on July 7, 1955, were that:

1. The Food and Drug Administration had insufficient funds, staff, and facilities to carry out its statutory responsibilities to protect the public health. A three to fourfold increase in personnel and facilities should be achieved within 5 to 10 years.

2. A more effective job of law enforcement could—and should—be accomplished. An expanded and improved informational and educational program was urged.

Midway in the fiscal year, the Food and Drug Administration began expanded research and educational efforts to improve the sanitary handling of grain. The regulatory program with respect to rodent-contaminated and insect-infested grain was resumed, with 12 carloads totaling more than a million pounds being seized during the year. Many times this amount was voluntarily diverted from human consumption.

The intensified grain sanitation program was recommended by a 17-member technical committee appointed jointly by the Secretaries of Agriculture and Health, Education, and Welfare. Both Departments, as well as the Fish and Wildlife Service of the Department of the Interior, are cooperating in this effort. Levels of contamination on which seizure decisions are based will be changed progressively as growers, shippers, and grain-elevator operators further improve their handling of this vital raw food.

Two amendments to the Federal Food, Drug, and Cosmetic Act were put into effect by the Food and Drug Administration during the year.

One amendment facilitates the establishment and amendment of food standards by simplifying ponderous and time-consuming procedures.

A second amendment enacted during the year provides a simplified procedure for establishing safe tolerances for pesticide chemicals which are necessary and useful in agriculture. Under the new pro-

cedure, 23 petitions for tolerances or exemptions therefrom were submitted during the year. Final action was taken on 4.

Amended definitions and standards of identity were promulgated for several cheeses, cheese foods, cheese spreads, enriched farina, catsup, and certain canned vegetables.

The Office of Vocational Rehabilitation, a third unit of the Department concerned with health, was engaged chiefly this year in expanding its program under the Vocational Rehabilitation Amendments recommended by the President and unanimously enacted by Congress in 1954.

"This law is especially noteworthy in two respects," President Eisenhower said at the signing ceremony. "In the first place, it re-emphasizes to all the world the great value which we in America place upon the dignity and worth of each individual human being. Second, it is a humanitarian investment of great importance, yet it saves substantial sums of money for both Federal and State Governments."

Already, this legislative landmark is bringing to a greater number of handicapped men and women the increased self-respect that comes from earning a living instead of depending upon others. A downward trend in the number of disabled workers restored to useful employment was halted and turned upward by the close of the fiscal year.

To achieve a substantial expansion of the State-Federal vocational rehabilitation system, Congress appropriated \$4 million more for this fiscal year than for the preceding year. Although State fiscal commitments were determined prior to enactment of the new law, a number of States moved to match the increased Federal funds with larger State appropriations.

Money alone, however, will not rehabilitate handicapped workers. More rehabilitation workers must be trained, more public and private agencies must lend a hand, and rehabilitation techniques must be refined and improved. All these are essential if vocational rehabilitation is to achieve its goal—prompt and effective help to every disabled person who needs it.

To increase the supply of trained rehabilitation workers, 80 teaching grants were made by the Department's Office of Vocational Rehabilitation, 37 short-term workshops or institutes were sponsored, and more than a thousand traineeships were awarded. Physicians, nurses, physical therapists, occupational therapists, psychologists, social workers, rehabilitation counselors, and speech therapists are among those being prepared for the expanded rehabilitation program.

To expand further the Nation's capacity to help disabled workers return to useful work, as well as to improve existing rehabilitation facilities, Federal grants were made to 130 public and private non-profit organizations. Many sheltered workshops or specialized re-

habilitation centers were thus enabled to provide services to more handicapped people. To help improve rehabilitation methods, a National Advisory Council on Vocational Rehabilitation, appointed this year, approved 22 applications for support of promising research and demonstration projects.

Taken together, these measures will make it possible to rehabilitate more disabled workers. It is important also that each disabled person begin his journey to personal and economic independence promptly—as soon as possible after suffering his disabling illness or accident. In this way, his skills do not lapse from disuse and his savings are not swept away by lengthy unemployment.

The 1954 “disability freeze” amendment to the Social Security Act protected the benefit rights of workers insured under old-age and survivors insurance who become permanently and totally disabled. During fiscal 1955, 46 States and Territories had designated their vocational rehabilitation agencies to determine or share in the determination of whether or not an applicant for “disability freeze” protection qualified for such protection.

During fiscal year 1955, the first in which the “disability freeze” was in effect, State vocational rehabilitation agencies were notified of 62,800 disabled men and women interested in securing rehabilitation.

Saint Elizabeths Hospital, the public mental hospital in the District of Columbia, observed its centennial during 1955—marking a century of progress in psychiatry and treatment of the mentally ill.

Major events included a conference of national and international leaders in psychiatry; the completion of a new Intensive Treatment Building at the hospital; and the production of a pageant, staged and acted by patients, depicting the life of the hospital's founder, Dorothea Lynde Dix, and subsequent progress in the treatment of the mentally ill. Scenes from the pageant were shown on a nationwide television network as part of the Department's continuing effort to bring about a better public understanding of mental illness and psychiatric treatment.

Freedmen's Hospital was also the subject of intensive study during the year, in a long-delayed effort to chart a future course of services to the District of Columbia area and the Nation.

Distinguished business and civic leaders and members of the medical and nursing professions composed the Freedmen's Hospital Study Commission. For the consideration of the Secretary, the Study Commission recommended that a new teaching hospital structure be built and that Freedmen's be affiliated with the Medical School of Howard University.

On January 31, 1955, President Eisenhower, in a special message to Congress, had outlined a number of measures for the general im-

provement of the health of the Nation. As has been indicated, a number of these measures were, in one form or another, adopted by Congress. Among the measures recommended in the health message was a proposal for helping Americans meet the rising costs of medical care through establishment of a Federal health reinsurance service to encourage private health insurance organizations to offer broader benefits to insured individuals and to extend coverage to more people. Another proposal was that action be taken to authorize matching grants to the States to help finance the costs of medical care for public assistance recipients—the aged, the permanently and totally disabled, the blind, and children deprived of parental care. No action was taken by Congress on these proposals during the period covered by the report.

Progress in Education

The serious problems confronting the Nation's schools and colleges in terms of shortages in teachers and buildings were of great concern to the Department during the year. This concern was expressed in legislation developed by the Department and submitted by President Eisenhower to Congress to mount an attack on the grave classroom shortage in the Nation's public schools.

School enrollment, which has continued to increase, reached a total of more than 38 million during the year. It is expected to climb to more than 46 million by 1960. Factors contributing to the unprecedented upsurge in school enrollment are an increased birthrate, an increase in the proportion of school-age children attending school, and an increase in the proportion of students finishing high school.

Although construction of schools reached a new high with the building of 60,000 classrooms during the year, proper school housing for the new students and to replace obsolescent buildings is not being built fast enough. President Eisenhower's special message to Congress in January 1954 proposed local, State, and Federal action to alleviate this grave—and growing—shortage of classrooms. The President's proposal was for a 3-year program of a fourfold nature:

1. That the Federal Government buy the bonds of school districts which cannot market their bonds at reasonable rates of interest. The President asked for an appropriation of \$750 million for this program, which had the advantage of being able to permit school districts to move quickly in offering bonds for sale to the public.

2. That the States and the Federal Government, acting together, encourage more general use of a plan already tested in some States. In these States, school districts which are unable to finance new buildings rent them from State agencies created to build schools. Under the President's plan, the Federal Government would have helped

facilitate the issuance of construction bonds by these agencies by advancing one-half of an initial reserve fund and agreeing to replenish this share as needed.

3. That a limited program of direct State and Federal grants be authorized. These grants would have gone, on the basis of proved need, to those school districts which cannot either repay borrowed money or afford the cost of renting a new building and would have been sufficient to permit them to qualify for assistance under one or the other of the foregoing proposals. An appropriation of \$200 million was requested for this part of the program.

4. That programs of statewide action aimed at removing many of the long-standing obstacles to local financing of school construction be encouraged. The Federal Government under the program would have paid one-half the administrative cost of programs of this kind.

The 83d Congress authorized 53 State and Territorial Conferences on Education, to be followed by a White House Conference on Education. The State and White House Conferences on Education were designed to deal with all the major problems of American education in a very fundamental way. The White House Conference was directed to "consider and report to the President on significant and pressing problems in the field of education."

By the end of the fiscal year, all States and Territories had appointed conference chairmen and conference planning committees. Seventeen State Conferences on Education were held during the year, with 32 scheduled between July 1 and the fall months. In addition to the statewide meetings about 3,800 community and county conferences and 200 regional conferences had been held or were scheduled in 27 States.

These conferences were designed to form an opportunity for the people themselves to undertake an examination of their school needs and to develop solutions for school problems or, when they are lacking, to bring them to the attention of the States or the Federal Government. They had already, at the close of the fiscal year, produced a quickening of interest in the problems of public education on the part of many millions of Americans. In the final analysis, these citizens are the ones who must determine what their schools should accomplish and provide the means by which this can be achieved.

Gallaudet College, the world's only college for the deaf, is a wholly independent educational institution in Washington, D. C. Through the Department, it receives funds appropriated by the Congress in support of its unique educational program. Significant steps were taken during the year to enlarge the program, broaden the curriculum, and generally improve the physical facilities of the college.

Plans and specifications were completed for a new library building, funds for which were appropriated by the 83d Congress. Approval was given by Congress to a proposal calling for the construction of a

new physical activities building and a girls' dormitory. Congress also indicated approval of a departmental plan for the progressive rehabilitation of the Gallaudet building and campus.

Howard University is another independent educational institution in the District of Columbia which is supported, in part, by Congress, acting through the Department. Work on five new buildings was initiated on the Howard campus during the year, as part of a program to provide larger and more modern quarters for the university. A new dental school building with extensive clinical facilities was also dedicated and placed in use during the year.

The American Printing House for the Blind is an independent institution in Louisville, Kentucky, which manufactures Braille textbooks and tangible teaching apparatus for use in schools for the blind. Through the Department, the Printing House receives funds appropriated by Congress to support its program, which benefits more than 7,000 children enrolled in residential and public school classes for the blind.

Progress in Social Security and Public Welfare

The growing significance of the social security system in our national life is indicated by the fact that over half the persons who are 65 years of age or older are eligible for old-age and survivors insurance benefits. Nine out of 10 mothers and children in this country can count on monthly benefits in case the family breadwinner dies.

Over 7½ million Americans were beneficiaries of the old-age and survivors insurance system in June 1955. Of this total, nearly 5.5 million were retired workers and their dependents and over 2 million were surviving dependents of deceased workers. Benefit payments in June 1955 totaled \$428 million, an increase of 45 percent since the close of the previous fiscal year.

The 1954 Amendments to the Social Security Act, adopted by Congress upon President Eisenhower's recommendation, materially strengthened the old-age and survivors insurance protection which is now available to 9 out of 10 American workers and their families. In the 1955 fiscal year, a principal task of the Social Security Administration was to make effective these improvements in the law.

The big job of changing the payment rates of some 6.6 million beneficiaries was completed on schedule. As a result, the checks for September 1954 were mailed on time at the new, higher rates. Over 6 million people receiving benefit payments from old-age and survivors insurance were also advised of the new, liberalized "retirement test." This provision of the 1954 amendments affords greater opportunities

to retired individuals to supplement their benefits through earnings from part-time or intermittent work.

Coverage by old-age and survivors insurance was extended rapidly to the new groups made eligible by the 1954 amendments. Every rural mail delivery box in the Nation received information about the eligibility of farm operators and additional farm workers. Procedures were worked out for the coverage of ministers on a voluntary basis. By the end of the fiscal year, 44 States, 3 Territories, and 13 interstate instrumentalities had arranged for certain of their employees to receive the protection of old-age and survivors insurance.

Special efforts were made to put the "disability freeze" provisions of the 1954 amendments into operation as soon as possible. The disability freeze enables workers covered by old-age and survivors insurance to preserve whatever eligibility for benefits they have earned up to the time they were permanently and totally disabled. During the fiscal year, about 400,000 potential applicants were identified, and 155,000 applied for the disability freeze of their social security benefit rights.

Procedures were also established to carry out provisions of the 1954 amendments calling for withholding of benefit payments from persons living outside the United States and working 7 or more days per month.

The State-Federal programs of public assistance reflected the growth and improvement of the old-age and survivors insurance system during the year, following enactment of these amendments.

Four groups among the needy are eligible for public assistance payments—the aged, the blind, dependent children, and persons permanently and totally disabled. Of the \$2.6 billion spent for all types of public assistance this year, 55.2 percent was from Federal funds, 36.1 percent from the States, and 8.7 percent from local sources.

For the most part, the 5.1 million persons receiving public assistance in June 1955 are not eligible for benefits under old-age and survivors insurance. Therefore, as more persons provide for their future security through personal thrift and contributions to the Old-Age and Survivors Insurance Trust Fund and other pension systems, there will be fewer people needing public assistance.

In February 1951, the number of persons receiving old-age benefits outstripped, for the first time, the number on the old-age assistance rolls. Although the aged population has been increasing yearly by 350,000, the number of old-age assistance recipients has continued to decline—by 34,000 in the past year—to a total of 2,549,000 at the end of the fiscal year.

Old-age assistance—the public assistance program that serves almost as many needy people and costs more to maintain than the three

other public assistance programs combined—should decline appreciably in the years ahead. About 18 percent of all people over 65 years of age were receiving public assistance this year. Because of recent improvements in the old-age and survivors insurance program, fewer than 16 percent of the aged are expected to need this aid by 1960.

Extension of old-age and survivors insurance coverage to more farm workers and farm operators will be chiefly responsible for this saving to the Nation. A majority of those now receiving old-age assistance live in rural areas or small towns, although a minority of all Americans 65 years of age or older live on farms or in villages. At present, the proportion of aged persons receiving public assistance in rural places and small towns is two-thirds higher than in metropolitan areas.

The 1954 improvements in old-age and survivors insurance will also help many widows and orphans who would otherwise have been dependent upon public assistance. About 17 percent of the families who now receive aid to dependent children funds are in need because of the death of a wage earner. By 1960, this should be reduced to 10 percent.

The Children's Bureau of the Social Security Administration has emphasized, in recent years, improving conditions of life for infants and preschool children. Other groups requiring special attention are adolescents in conflict with society, children of migratory workers, mentally retarded children, and children in unprotected adoptions.

Help was given these groups of children and others this year through research studies, publications for parents and professional workers, and grants to the States to support programs for maternal and child health, crippled children, and child welfare services. A new Division of Juvenile Delinquency Services was established to aid States and communities working to prevent and treat this serious social malady.

The Bureau of Federal Credit Unions of the Social Security Administration was operated at no cost to the taxpayer this year. Fees collected by the Bureau covered the direct costs of chartering, supervising, and periodically examining federally chartered credit unions, which are voluntary associations encouraging thrift and offering credit "for provident and productive purposes." The number and assets of Federal credit unions continued to increase during the year. For the first time, total assets exceed \$1 billion.

Progress in Program Development

Civil defense responsibilities of considerable importance were delegated to the Department at the beginning of the fiscal year by the Federal Civil Defense Administration, with the approval of President

Eisenhower. In general, the Department will be responsible, in the event of attack, for control of hazards to health and the provision of clothing and temporary financial assistance to civilians. Substantial progress was made during the year in the assumption of these responsibilities.

Assistance was provided, through the States, to local communities to help alleviate health hazards, suffering, and hardship caused by hurricanes and other natural disasters during 1955. This tested working relationships with Federal Civil Defense Administration regional offices and with State agencies in the utilization of Federal resources to cope with disaster.

Significant research progress was made by the Public Health Service and the Food and Drug Administration in studying health and sanitation problems related solely to civil defense. A sizable buildup of the Public Health Service Reserve Corps was begun, and arrangements were made for specialized civil defense training for its members. For State and local food and drug officials, a civil defense training course was developed which will ultimately reach 50 strategic areas and an estimated 1,000 officials.

Stimulation of civil defense interest on the part of State health departments and voluntary medical and health groups resulted from a series of regional conferences and seminars, with all States represented. Representatives of all State welfare departments met in a series of regional conferences to develop plans for emergency financial and clothing assistance to victims of an attack. "Pilot centers" were organized in selected States to prepare civil defense teaching materials for use in the schools.

The Department also participated in two governmentwide test exercises involving relocation of staff and the continuity of essential headquarters functions outside of Washington. The first of these, in November 1954, involved only the headquarters relocation plan. The June 1955 exercise, "Operation Alert," required extensive activities by both headquarters and regional office staff.

Surplus Federal property is donated, through the Department, for public and private health and educational uses. During the 1955 fiscal year, surplus personal property with an original acquisition value of \$132.2 million was allocated to the States for distribution. Transfer of real property was made to 225 institutions, which thereby acquired 1,521 acres of land and 669 buildings, valued at \$16.2 million.

Legislation enacted near the close of the fiscal year assures that millions of dollars worth of useful Federal surplus property will continue to benefit health and educational activities in the States. The new statute also improves the operation of this program, especially by enabling the States to assist in its administration.

The Committee on Aging of the Department coordinates activities related to the great increase in the numbers and proportion of older people that has characterized America in recent years.

Recognizing that the rapidly growing number of aged persons in the population poses new challenges of great significance to the Nation in social and family responsibility, in health, education, employment, and income maintenance, the Secretary of Health, Education, and Welfare initiated a study of the Department's Committee on Aging during the fiscal year. In June 1955, a departmental order designated an Assistant Secretary to head a reorganized committee made up of the heads of the Department's constituent agencies to advise the Secretary, develop programs of departmental action, and to serve as a clearinghouse for information and aid the States, local communities, and voluntary organizations in programs for the benefit of the Nation's senior citizens.

During the year, the Committee issued a pamphlet entitled "Aging—A Community Responsibility and Opportunity," completed a revision of its 500-item "Selected References on Aging," and commenced a new "Fact-Book on Aging," an "Inventory of Official State Groups in Aging," and "An Inventory of Federal Programs and Activities in Aging."

The Committee also maintained its extensive program of public information and consultation with foundations, organizations, and State and local governments. The Department was a cosponsor of the eighth annual Conference on Aging of the University of Michigan.

One of the most significant developments was the initiation by the Department of an approach toward closer coordination of the activities of all Federal departments in the field of aging. A plan was presented to the sub-Cabinet by the Department for the organization of an Inter-Departmental Working Group on Aging, and approval was obtained. At the invitation of the Secretary, 10 departments and agencies designated representatives to the Working Group. The first two meetings were held at the Department, on June 10 and July 15. The initiation of the Working Group quickly demonstrated the interrelationship of Federal programs and the need for closer coordination. Plans were commenced for placing the Working Group on a more formalized and permanent basis.

International Activities.—"In the four quarters of the globe, who reads an American book? Or goes to an American play? Or looks at an American picture or statue?" Such was, in 1820, Sydney Smith's now-famous criticism of the United States. He continued by inquiring derisively, "What does the world yet owe to American physicians and surgeons? What new substances have their chemists discovered?"

Since Smith asked his questions, the world has come to respect, not only American writing and art but American education, science, and medicine as well. Every year thousands of people from many lands, experts and students alike, journey to the United States to study developments in health, education, and social welfare. This Department is proud to be one of their principal "ports of call."

This year, for example, the Department supervised the programs of study and training of 174 United Nations Fellows. In all, some 3,464 foreign visitors received training planned or supervised by the Department. In addition, about 400 American technicians in health, education, and social welfare were recruited for foreign assignments with the International Cooperation Administration. Technical assistance missions in 38 free nations were aided in this manner.

Interdepartmental Activities.—Two matters of interdepartmental concern that should be recorded occurred during the year. One was the participation by the Department in a study made by the Department of Agriculture and the Department of Commerce on the problems of low-income farm families. The report of the Secretary of Agriculture, which contained summaries of work of the committees of the three participating departments, was published in early June 1955. It pointed out that the joint study provides an excellent base for the development of specific plans for definitive action to deal effectively with the difficulties encountered by low-income farm families.

The other was the establishment of the President's Committee on Migratory Labor. The Committee included the Secretary of Labor, as chairman; the Secretary of Agriculture; the Secretary of the Interior; the Administrator of the Housing and Home Finance Agency; and the Secretary of Health, Education, and Welfare. The formation of this Committee constituted a first step toward considering and dealing with the problem of migrant labor—a problem that for 50 years had been under study and investigation but had failed to command the continuing attention of the Federal Government.

During this year the Department also participated actively in the work of the Commission on Intergovernmental Relations—the Kestnbaum Commission. The Commission gave special attention to the various grant-in-aid programs, and the Department prepared extensive analyses of its activities for the use of the Commission and reviewed and commented upon the Commission's proposals and recommendations. It is gratifying to note that after such thorough study the Commission found relatively little wrong with the Department's programs. Most of the Commission's recommendations were

in accord with views of this Department. The report of the Commission should go far toward promoting a better understanding of the Department's work and its relationship to the several States.

Progress in Management

Of the important and far-reaching proposals for government reorganization proposed by the Hoover Commission, 13 were applicable to the work of the Department of Health, Education, and Welfare without any further action required by other agencies of government or Congress. At the close of the fiscal year these proposals were under careful study by the Department.

Congress appropriated \$2.1 billion to the Department during this fiscal year, for all purposes. In addition, receipts of the Old-Age and Survivors Insurance Trust Fund totaled nearly \$5.6 billion and disbursements totaled nearly \$4.5 billion. Of the funds appropriated by Congress, 89 percent was distributed to States, communities, institutions, and individuals, in the form of grants, scholarships, traineeships, etc.

At the end of the fiscal year, the Department had 39,927 full-time employees working in its offices, hospitals, and laboratories throughout the Nation and overseas. Nine regional offices coordinated activities throughout the Nation.

An organization of such size, dealing with complex matters vital to the well-being of every citizen, requires the best possible structure and management. More efficient, effective, and economical operations were constant goals of the Department during the 1955 fiscal year.

The first comprehensive and long-range study of the Department's managerial responsibilities was made this year by the consulting firm of Cresap, McCormick & Paget. The Office of the Comptroller was established to give increased attention on behalf of the Secretary to all budgetary and fiscal matters. The Office of Administration was reorganized to provide more effective guidance to the units of the Department with respect to such problems as organization, work planning, and executive development.

In addition to the special surveys and reorganizations described elsewhere in this report, inventories were made of real and personal property for which the Department is responsible and a survey was completed of the procedures for auditing the Department's grants-in-aid to the States. A Departmental Staff Manual on Physical Security was issued, containing detailed information concerning the Department's physical security program, policies, and procedures.

Net increases in staff were necessary only at the National Institutes of Health and the Bureau of Old-Age and Survivors Insurance, in both cases because of new legislation involving major expansions of program.

During the year, cash awards totaling \$14,250 were made to 350 employees who suggested better ways of doing the Department's job. Estimated savings as a result of employees' suggestions amounted to \$119,998, and most of these savings will recur annually. There were also many improvements not measurable in dollars that were rewarded by cash awards.

Illustrative economies made in the course of the Department's operations this year include:

1. Installation of an electronic data processing system in the Bureau of Old-Age and Survivors Insurance which will cut costs by more than \$1 million annually.

2. Freeing 9,775 pieces of office equipment, valued at \$651,160, for reuse elsewhere in the Government.

3. Turning in an estimated \$41,855 to the Treasury from the sale of useless records as waste paper.

4. A host of reductions in the volume of paperwork. For example, the variety of postcards used by the States to report morbidity data to the Public Health Service was cut from 82 to 5.

From the standpoint of the general management of the Department, as distinguished from individual problems associated with specific programs, perhaps the major concern is with the important and continuing task of welding together the many programs of the new Department into an operating whole. The job remained complicated because of the width and the breadth of programs which fall within the Department's responsibilities. These programs cover a spectrum as broad as the human needs—and, indeed, the human aspirations—of the many millions of Americans who every day, in one way or another, are touched by the work of the Department of Health, Education, and Welfare. Although much, certainly, remained at the end of the year to be accomplished—as will, indeed, always be true in a changing and dynamic society—it can be recorded that substantial progress was made in the endeavor to give coherence and unity to the management of the Department and to enhance the effectiveness of its work on behalf of the American people.

Table 1.—Grants to States: Total grants under all Department of Health, Education, and Welfare programs, fiscal year 1955

(On checks-issued basis)

States, territories, and possessions	Total	Social Security Administration	Public Health Service	Office of Education	Office of Vocational Rehabilitation	American Printing House for the Blind
Total.....	\$1,815,694,000	\$1,455,855,874	\$95,048,735	\$238,974,453	\$25,599,038	\$215,000
Alabama.....	38,356,842	30,321,541	2,923,962	4,417,953	687,890	5,496
Arizona.....	13,246,513	9,572,158	374,108	3,148,719	150,123	1,405
Arkansas.....	27,948,611	22,598,593	2,399,141	2,509,425	437,238	4,214
California.....	210,869,101	162,632,415	4,409,545	42,573,053	1,840,255	13,833
Colorado.....	33,010,492	27,242,618	966,097	4,000,514	199,034	2,229
Connecticut.....	16,149,786	11,747,820	514,193	3,536,341	348,501	2,931
Delaware.....	2,646,810	1,604,620	504,421	399,509	167,924	336
District of Columbia.....	5,345,213	4,521,103	320,225	110,139	392,616	1,130
Florida.....	43,826,138	35,430,301	2,385,047	5,186,416	819,244	5,130
Georgia.....	60,354,768	46,625,370	4,222,608	7,953,966	1,547,175	5,649
Idaho.....	7,283,258	5,325,866	426,172	1,455,968	74,213	1,099
Illinois.....	70,379,066	61,093,586	2,950,476	5,048,707	1,274,632	11,665
Indiana.....	25,185,941	20,147,518	1,644,409	2,998,101	392,249	3,664
Iowa.....	24,765,357	21,756,514	1,495,118	1,196,551	313,632	3,542
Kansas.....	27,003,359	19,141,309	1,294,301	6,280,570	284,919	2,260
Kentucky.....	35,203,446	30,011,463	2,582,215	2,404,880	201,376	3,512
Louisiana.....	70,374,839	65,212,221	2,506,024	2,091,656	560,724	4,214
Maine.....	10,998,702	8,307,190	794,220	1,789,914	107,578	---
Maryland.....	22,127,419	11,309,808	1,306,211	9,202,216	305,001	4,183
Massachusetts.....	59,835,200	54,860,594	2,681,601	1,965,333	319,947	7,725
Michigan.....	56,737,364	45,701,864	2,663,826	7,277,073	1,084,372	10,229
Minnesota.....	29,599,000	26,185,285	1,270,068	1,788,762	350,030	4,855
Mississippi.....	29,889,972	25,090,656	2,598,521	1,778,164	418,692	3,939
Missouri.....	80,435,684	73,911,717	2,045,651	3,865,391	608,345	4,580
Montana.....	7,967,021	6,240,097	306,966	1,272,253	147,033	672
Nebraska.....	12,142,029	9,216,839	912,589	1,778,700	232,528	1,313
Nevada.....	3,486,068	1,355,645	327,121	1,777,956	25,346	---
New Hampshire.....	4,983,124	3,605,768	623,840	695,289	58,227	---
New Jersey.....	20,214,949	14,283,426	1,918,751	3,508,790	496,840	6,962
New Mexico.....	16,326,560	10,277,772	629,736	5,287,021	129,802	2,229
New York.....	122,150,966	108,542,388	4,018,911	7,869,339	1,702,678	17,650
North Carolina.....	38,955,322	32,539,509	2,942,336	2,538,487	924,364	10,626
North Dakota.....	5,763,692	4,888,609	200,825	564,726	108,524	1,008
Ohio.....	69,394,706	54,903,083	4,691,042	9,245,196	545,400	9,985
Oklahoma.....	60,819,349	50,607,348	1,890,892	7,789,277	529,175	2,657
Oregon.....	15,016,891	12,669,806	523,747	1,470,870	349,934	2,534
Pennsylvania.....	64,408,586	53,078,951	5,565,047	3,859,025	1,891,364	14,199
Rhode Island.....	9,146,890	6,912,220	190,108	1,923,278	121,284	---
South Carolina.....	26,160,352	19,968,776	2,815,726	2,909,521	463,367	2,962
South Dakota.....	8,423,508	6,519,319	451,079	1,350,150	101,739	1,221
Tennessee.....	43,036,435	36,234,880	2,904,300	3,217,645	674,999	4,611
Texas.....	112,996,222	90,600,452	6,036,172	15,179,437	1,171,733	8,428
Utah.....	10,750,643	7,135,395	667,885	2,816,026	130,146	1,191
Vermont.....	4,184,213	3,654,470	91,376	336,579	101,788	---
Virginia.....	33,109,068	12,191,817	2,305,932	18,027,649	578,113	5,557
Washington.....	46,899,718	32,524,184	1,562,587	12,300,913	509,744	2,290
West Virginia.....	24,429,637	21,724,769	1,472,487	652,907	576,451	3,023
Wisconsin.....	27,069,713	22,902,013	2,148,715	1,445,491	568,028	5,466
Wyoming.....	3,421,551	2,425,318	304,852	675,054	86,327	---
Alaska.....	5,407,596	1,814,678	221,195	3,326,368	45,355	---
Hawaii.....	7,553,148	3,921,982	568,194	2,895,897	166,678	397
Puerto Rico.....	9,403,904	5,008,581	3,441,707	673,956	277,461	2,199
Virgin Islands.....	429,258	355,709	36,457	37,092	---	---

Social Security Administration

Social Security in 1955

AS THE FISCAL YEAR ended, the twentieth anniversary of the Social Security Act was drawing near. Appropriately, this year's report takes stock of the achievements of the past 12 months against a background of two decades of progress.

The last year has been one of the most significant, in many respects, in bringing the old-age and survivors insurance program within sight of its goal. As a result of the 1954 amendments, signed by President Eisenhower on September 1, about 9 out of 10 of the Nation's jobs are now within the coverage provisions of the contributory plan to maintain income after retirement or death. Nine-tenths of the young mothers and children in the country have survivorship protection that would assure them of monthly benefits if the breadwinner were to die today.

The basic social insurance program has made long strides since it first provided old-age benefits for industrial and commercial workers. The expanded program of broad coverage, protecting against the risk of wage loss resulting from the death as well as from the old age of the worker, is still far from mature. No one has yet been under the program for a full working lifetime nor will the beneficiary rolls reach their full growth until practically everyone who works for a living has had an opportunity to gain protection. Significantly, however, the 1954 amendments, by achieving almost universal coverage and other desirable modifications of old-age and survivors insurance, provide the assurance of future protection for all segments of the economy.

When the Social Security Act was formulated 20 years ago, there was clear recognition of the continuing need for public assistance as well as social insurance. The Committee on Economic Security, in

suggesting a dual attack on the insecurity of old age, stated: "An old-age insurance program could be expected in time to carry the major, but never the entire, load. . . . Assistance programs have a definite place, even in the long-time planning for old-age security."

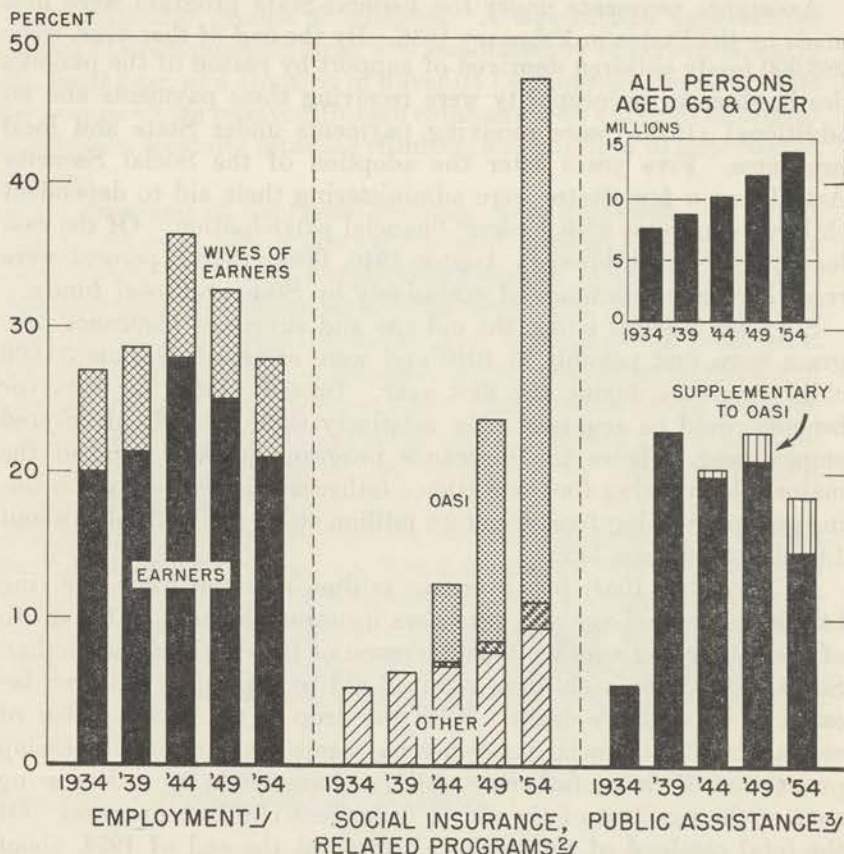
Since February 1951, the social insurance program can be said to be carrying "the major load." In that month, the number of aged drawing old-age and survivors insurance benefits passed 2.8 million, exceeding slightly for the first time the number on old-age assistance. At the beginning of the 1955 fiscal year, the 5.1 million aged beneficiaries receiving insurance benefits was almost double the assistance load. At the close of the fiscal year, 6.1 million aged persons drew insurance benefits and 2.5 million assistance payments, a ratio approaching $2\frac{1}{2}$ to 1.

The number of recipients of old-age assistance has declined since the autumn of 1950, ranging between 2.5 million and 2.6 million in the past 2 years. In relation to our growing aged population, the decline has been impressive. And increasingly as the old-age and survivors insurance program has reached more of the aged group, the public assistance program has served as a backstop for individuals whose insurance benefits are inadequate for their needs, either because of low benefits due to low or irregularly covered wages or because of special needs such as medical care.

The growth of insurance protection for the aged over the past 20 years and the increasingly supplementary character of public assistance is illustrated in chart 1. In December 1934, only about 5 percent of the aged received payments under the social insurance and related programs then in existence—public employees' retirement systems and veterans' pension and compensation programs. Another 5 percent received public assistance including work relief. Just over one-fourth were earners or the wives of earners. Perhaps 1 out of every 2 persons aged 65 and over was mainly or wholly dependent on relatives and friends for support.

In contrast, at the end of 1954 all but 15 percent of the aged had income from employment, social insurance and related programs, and/or public assistance. Social insurance has made the major contribution in improving the income situation of the aged. Almost half the aged population in December 1954 was actually receiving payments under social insurance and related programs. Old-age and survivors insurance alone was then paying benefits to some 5.3 million while an additional 1.4 million aged workers (of whom from 300,000 to 400,000 had aged wives) were insured and could have received benefits if they had retired. Together these groups aggregated 7 million or one-half of all aged. Public assistance provided the principal support for more than 2 million aged persons and supplemented old-age and survivors insurance payments for another half million.

Chart 1.—ESTIMATED PERCENT OF AGED PERSONS WITH MONEY INCOME FROM EMPLOYMENT, SOCIAL INSURANCE, AND PUBLIC ASSISTANCE, DECEMBER OF SELECTED YEARS, 1934-54



¹ Includes persons with casual employment whose main support was from other sources.

² Old-age and survivors insurance, railroad and public employees' retirement, and veterans' pension and compensation programs.

³ Excludes persons supported by public institutions. Includes persons on work relief projects in the 1930's.

In December 1954, the proportion of persons with some earnings from employment was at about the same level as 20 years earlier, a decline from the significantly higher levels of the war years.

The effect of the 1954 amendments in greatly strengthening the gains of the last two decades will be evident even within the next few years. By 1960, the proportion of the aged population who either are receiving insurance benefits or could receive benefits on retirement from gainful employment will have risen from one-half to about two-thirds.

Provisions to improve the economic security of children have also been greatly strengthened in the past 20 years. Because the original Social Security Act did not include survivors insurance, the full bur-

den of income support for children in need due to the death of the father was placed on the program of aid to dependent children.

Assistance payments under the Federal-State program were first made by the States in February 1936. By the end of that year, some 285,000 needy children deprived of support by reason of the parent's death, absence, or incapacity were receiving these payments and an additional 119,000 were receiving payments under State and local programs. Five years after the adoption of the Social Security Act all but a few States were administering their aid to dependent children programs with Federal financial participation. Of the case load of 854,000 children in August 1940, fewer than 5 percent were receiving payments financed exclusively by State and local funds.

Survivor benefits under the old-age and survivors insurance program were first payable in 1940 and were awarded to some 50,000 child survivors during the first year. Insured status for survivor benefits could be acquired after relatively short periods of covered employment. Hence the insurance program quickly assumed the major role in caring for the Nation's fatherless children—a diminishing group dropping from about 2.8 million at the end of 1934 to about 1.9 million 20 years later.

In December 1954, just over one million children were receiving benefits under old-age and survivors insurance because of the death of the father and another 40,000 because of the death of the mother. Some 240,000 needy children received aid to dependent children because of the father's death. With the drop in the total number of orphans and with social insurance payments reaching an increasing proportion of them, fatherless children have made up a decreasing part of the caseload of the aid to dependent children program. Of the total caseload of 1.6 million children at the end of 1954, about 85 percent had been deprived of normal support, not by death of the father but because of the continued absence from home or the incapacity of either parent.

Altogether, about 3.3 million children received financial support in December 1954 under a public income-maintenance program—including programs of the Veterans Administration but not including children in families receiving unemployment or disability insurance.

Many of the children receiving income support under public programs, as well as hundreds of thousands of others, have benefited under the Social Security Act provisions for services for maternal and child health, child welfare, and crippled children. The contributions of these programs over the last 20 years in improving the well-being of children and in saving the lives of infants and their mothers have been immeasurably great. Had the mortality rates of two decades ago not been improved, 24,000 mothers would lose their lives in child birth this year—twelve times as many lost lives as the 2,000 which are expected under present-day rates.

In carrying forward the gains for the Nation's younger generation, the Children's Bureau gave special attention in 1955 to the problems of four particular groups of children. A coordinated approach to problems of delinquent children was facilitated by the creation, early in the fiscal year, of a Division of Juvenile Delinquency Service. The other groups which received Bureau emphasis were children of migratory workers, mentally retarded children, and children in unprotected adoptions.

Other programs of the Social Security Administration—not all of which are 20 years old—made further contributions during the year to family security. The Federal-State program of aid to the permanently and totally disabled, established under the 1950 amendments, was aiding 236,800 persons in 43 States at the end of the fiscal year. The increase of more than 10 percent over the number of recipients in June 1954 reflected the relatively recent introduction of the program in some of these States. Aid to the blind, included in the original Social Security Act, went to 104,000 persons in June 1955, about 3,000 more than a year earlier.

The program of Federal credit unions, too, has a role in increasing family security. Credit unions promote systematic savings and use the funds thus accumulated for consumer loans at reasonable rates of interest. During the fiscal year 1955—marked by the twenty-first birthday of the program of federally chartered credit unions—the continued growth of these credit unions brought their aggregate assets above \$1 billion.

Program Administration in 1955

Implementation of the 1954 amendments was accomplished smoothly and speedily. Over 61½ million old-age and survivors insurance benefit checks were recomputed at new rates and released in October, the month following the signing of the amendments. For the Bureau of Old-Age and Survivors Insurance, the first half of the fiscal year saw emphasis on public information activities and on preparation for the new coverage and other provisions which became effective on January 1, 1955.

The 1954 amendments to preserve rights to old-age and survivors insurance benefits in the event of disability resulted in a new and major work load. A Medical Advisory Committee was established to advise on the medical policies and standards needed in implementing the new provisions. By the end of the fiscal year, agreements for the administration of the disability freeze had been negotiated in almost all States, and a total of 143,000 freeze applications had been taken. The increase in benefit amounts resulting from the disability freeze provisions was about to come into effect as the fiscal year closed, and much work had been done toward completing determinations of disability

for individuals who were aged 65 or over and therefore potentially eligible for immediate increases.

Early in the fiscal year, arrangements were completed to implement 1954 legislation transferring to the Bureau of Federal Credit Unions the supervision and examination of credit unions chartered by the District of Columbia. This was the second year in which this Bureau's operations were financed entirely by fees collected from the credit unions.

A total of 18,514 employees, the vast majority of whom were in district, area, and regional offices, were on the payroll of the Social Security Administration at the end of June. The staff had been increased by about 4,000 over the previous year's total to meet the demands of the expanded and growing program.

Through participation in international meetings and similar international activities relating to social security, the Social Security Administration added to its own knowledge and insight while contributing its experience to other countries.

The high point of the year's international social welfare activity was the Tenth Session of the United Nations Social Commission, held in New York in May, with the Commissioner of Social Security serving as principal adviser to the United States member of the Commission. The Interdepartmental Committee on International Social Welfare Policy, chaired by the Director of the Bureau of Public Assistance, had given major attention to preparation for the session of the Social Commission. Through this Interdepartmental Committee and through the Interdepartmental Labor Policy Committee, staff members participated in the consideration of important social welfare items coming before the United Nations, its various organs, the International Labor Organization, and the Inter-American organizations, and developed policy statements for the consideration of the Department of State.

The Chief of the Children's Bureau continued to serve as United States Representative to the United Nations International Children's Fund and attended the World Health Assembly in Mexico City. Other international meetings in which staff members participated included the Tenth Pan American Child Congress in Panama City, the Fifth Inter-American Conference on Social Security in Caracas, and the Fifth International Congress on Mental Health in Toronto. Another important phase of the Social Security Administration's international activities was its active cooperation with national agencies, committees, and conferences.

There was a slight increase in technical missions for which the Social Security Administration recruits and nominates qualified personnel in social welfare, social insurance, child health, and credit cooperatives under an agreement with the Foreign Operations Administration

(now International Cooperation Administration). During the year, 23 specialists were on duty in 12 countries.

Nearly twice as many persons from foreign countries as last year requested training in the establishment of social security systems following recent legislation, in management of credit unions, in management of institutions and welfare agencies, and in staff and personnel development to meet new agency requirements. There was a marked increase in the numbers studying technical aspects of maternal and child health. A total of 714 visitors from some 50 countries came to the Social Security Administration for planning and training in various fields. Of these, 127 were long-term trainees under the auspices of the United Nations, the World Health Organization, or FOA.

During the year there was major movement forward on the aspects of civilian defense for which the Social Security Administration would have planning or administrative responsibility. The program administered by the Social Security Administration under normal conditions was analyzed and those functions which would be essential in time of major emergency were identified and reported through the Department to the Office of Defense Mobilization. Participation in the two "Exercises" under the direction of ODM and the Federal Civilian Defense Administration afforded opportunity to evaluate the program activities so identified and to make further progress in the development of plans related to relocation, protection of essential records, and other administrative aspects of defense planning.

During the year the Secretary assigned to the Social Security Administration two of the programs delegated to the Department by FCDA: emergency financial assistance and emergency clothing for civilians. These were assigned by the Commissioner to the Bureau of Public Assistance for administration.

Participation in Operations Alert by all Bureaus and the Commissioner's Office tested not only the continuity of essential functions under emergency conditions but also the initial plans developed for the administration of the delegations. The Social Security Administration has participated in the analysis and planning preliminary to the development of other defense plans of the Department related to the fields of income maintenance and welfare services.

Old-Age and Survivors Insurance

The 1954 amendments in the old-age and survivors insurance program, added to those made in 1950 and 1952, have equipped the program to perform its functions well. It now provides protection for almost all American families against the loss of the earnings they

depend on for their support when that loss is caused by retirement or death of the family earner. And, for several reasons, the protection it provides will be more nearly adequate in the future than it has been up to now.

First, the coverage of the program has been made very nearly universal; this means not only that more people are protected under the program but also that those who move from one kind of work to another have all their earnings covered, rather than only a part. Before 1951 major areas of work were outside of the coverage of the program—work in agriculture and domestic service, farm and non-farm self-employment, and employment for Federal, State, and local governments and for nonprofit organizations. The only major areas that still remain excluded are Federal employment already under a retirement system, members of the Armed Forces (whose present temporary coverage expires March 31, 1956), and self-employment in certain professions. Of particular importance is the extension of coverage to both self-employment and wage employment in agriculture that was accomplished by the 1950 and 1954 amendments.

Second, the "new start" adopted in 1950 will increase the benefit amounts of those coming on the rolls in the future. Under this provision most retired workers will have their benefits based only on earnings after 1950; the relatively low wages of the late thirties and forties therefore will not operate to depress their average monthly wages and benefit amounts.

Third, the provision for the "drop-out" adopted in 1954, under which as many as 5 years of low earnings may be disregarded in determining the average monthly wage, will improve benefit amounts. It will permit the exclusion of periods of temporary unemployment, apprentice earnings, or "tapering off" toward retirement, so that an individual who by and large has worked throughout his life may receive benefits based on an average at or not far below that of his full-time earnings.

Fourth, the provision adopted in 1954 for "freezing" the benefit rights of workers who become totally disabled will mean that such workers, if they have been substantially attached to the work force before incurring their disabilities, will have their insured status preserved and will be able to receive full-rate benefits when they reach retirement age.

The effect of all these changes will be that the program will pay higher benefits in the future to individuals who have worked throughout their adult lives and supported themselves and their families but who have had gaps in their earnings records because of noncovered jobs, unemployment, or disability, or who under prior law would have had periods of low earnings counted against them.

An additional reason why protection will be more adequate in the future is that the benefit formula itself has been revised to pay a benefit which is a higher proportion of previous earnings and the amount of earnings that is creditable annually under the program has been increased. Finally, the retirement test of the program has been improved to apply more equitably to beneficiaries regardless of the kind of work they do and to make it possible for beneficiaries to engage in more part-time and seasonal work without forfeiting benefits.

The sections that follow describe the contribution that the revised old-age and survivors insurance program is making to the security of the Nation's families and how that revised program has been put into effect.

What the Program Is Doing

The following summary of significant statistical indices gives a brief picture of the program in 1955. Neither the figures on beneficiaries and benefit amounts nor those on the protection provided by the program reflect the improvements brought about by the disability freeze, since increased benefits resulting from the freeze were not payable until the beginning of the 1956 fiscal year. Preliminary figures on the substantive effect of the freeze are presented in the section describing its administration.

BENEFICIARIES AND BENEFIT AMOUNTS

In June 1955 about 7.6 million people were receiving monthly benefits under the program. Some 6.1 million of these beneficiaries were aged 65 and over—4.2 million of them retired workers and 1.8 million the wives and dependent husbands of retired workers and the widows, dependent widowers, and dependent parents of workers who had died. Of the remaining 1.5 million, some 300,000 were mothers and 1.2 million were children.

In June 1955, the average insurance benefit paid to a retired worker who had no dependents also receiving benefits was \$58.20 a month. When the worker and his wife both received benefits, the average for the family was \$102.20. Families consisting of a widowed mother and two children received, on the average, \$132.30.

The benefit awards for persons now coming on the rolls for the first time are considerably higher than those given above for all beneficiaries. The higher amounts reflect the more liberal computation provisions of the 1954 amendments, under which up to 5 years of low earnings may be dropped from the computation of the average monthly wage. Among beneficiaries who had come on the rolls by

June 1955 and whose benefits are based on earnings after 1950 with eligibility to omit years of lowest earnings, the average for a retired worker with no dependents receiving benefits was about \$78, for an aged couple about \$130, and for a widowed mother and two children approximately \$182.

THE PROTECTION PROVIDED

Of the almost 14 million people aged 65 or over in the United States in December 1954, 51 percent were eligible for benefits under old-age and survivors insurance; 38 percent were actually receiving them. The percentage of aged persons who are eligible is expected to rise to 65 percent by 1960.

Of the population under 65 years of age, 65 million were insured at the beginning of the calendar year 1955. Some 24 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 at age 65 and their families are assured of protection in the event of their death. An additional 41 million were insured but would have to continue in covered work for an additional period to make their insured status permanent. Nine out of 10 of the mothers and young children in the Nation were assured that they would receive monthly benefits in case of the death of the family earner.

THE COVERAGE OF THE PROGRAM

About 67½ million people will have contributed toward old-age and survivors insurance during calendar year 1955. An estimated additional 1½ million people will have been afforded insurance protection jointly by the railroad retirement and old-age and survivors insurance programs. In June 1955, about 91 percent of all jobs in paid civilian employment were covered by the program or were eligible for coverage. An additional 3 percent of the Nation's paid civilian jobs, not covered by old-age and survivors insurance, were covered by Federal, State, or local government retirement systems. The residual group, comprising about 6 percent of the Nation's paid civilian employment, was not covered under any public retirement program. This group consisted mostly of self-employed persons whose annual net earnings were less than \$400, certain self-employed professional people, and domestic and farm workers who did not earn sufficient wages from any one employer to meet the minimum coverage requirements of the law. Members of the Armed Forces, while not covered by old-age and survivors insurance on a contributory basis, are granted wage credits of \$160 for each month of active service after September 15, 1940, and before April 1, 1956.

INCOME AND DISBURSEMENTS

Program expenditures during the fiscal year totaled \$4,436 million, of which \$4,333 million was for benefit payments and \$103 million for administrative expenses. Total receipts were \$5,534 million, including \$5,087 million in net contributions, \$438 million in interest on investments, and \$10 million in transfers from the railroad retirement account. Receipts exceeded disbursements by \$1,098 million, the amount of the increase in the trust fund during the year. At the end of June 1955, the fund totaled \$21.1 billion.

On June 30, all assets of the fund, except \$560 million held in cash, were invested in United States Government securities as required by law; \$2.3 billion were invested in public issues (identical with similar bonds owned by private investors), and \$18.2 billion were invested in special certificates of indebtedness bearing interest at the average rate paid on the total interest-bearing Federal debt at the time they were issued. The average interest rate on all investments of the trust fund at the end of the fiscal year was about 2.3 percent.

Administering the Program

EFFECTUATING THE 1954 AMENDMENTS

Immediately after enactment of the amendments, recruitment objectives were established for each part of the Bureau; these objectives were related to anticipated loads, the ability to recruit qualified personnel, and the rate at which new staff could be successfully trained and absorbed. The net personnel increase required by the 1954 amendments was approximately 3,400. This brought Bureau staff at the end of the fiscal year to just over 17,600 employees—the staff needed for operations at the new and continuing workload level at which the Bureau will operate.

Training on the amendment provisions and on new policies and procedures was essential for both experienced and new personnel. One device followed was to train groups of key supervisory and technical people, who then carried the new knowledge back through the supervisory line and to all parts of the country to people already on the Bureau's staff. Central office training classes were established in Baltimore for new employees. More than 1,200 new field employees received intensive instruction in these courses during the fiscal year.

One of the first tasks required by the amendments was the conversion of the monthly benefit checks of over 6.5 million beneficiaries to the new higher amounts. This operation was completed in time to permit release of the September checks when they were due. This was accomplished through timely procedural planning and testing,

the maximum use of mechanical methods for the actual conversion, and close synchronization of operations with those in the Treasury Department's disbursing offices.

The burden of administration stemming from the amendments was greatest during the period from January 1, 1955, to the end of the fiscal year. In the first 3 months of 1955, over 100,000 more claims applications were received than in the first 3 months of 1954. Because this influx of claims was concentrated in such a short period of time, pending loads in the district offices rose to unprecedented levels. By June 30, 1955, substantial inroads had been made in this backlog, but the district office pending load was still high.

ADMINISTERING THE DISABILITY "FREEZE"

Under the new disability "freeze" provision, persons having both substantial and recent covered work prior to disablement are eligible to have their insurance rights frozen during the period in which long-continuing total disability prevents them from performing any substantial gainful work. Adoption of the disability freeze provision not only created an entirely new area of program administration for the Bureau, but also, for the first time, provided for Federal-State administration of a phase of the old-age and survivors insurance program. The law directs the Secretary of Health, Education, and Welfare to enter into agreements with vocational rehabilitation agencies or other appropriate State agencies to make determinations of disability for freeze purposes.

A new division in the Bureau of Old-Age and Survivors Insurance—the Division of Disability Operations—was assigned primary responsibility for making determinations in cases not covered by State agreements and for reviewing certain disability determinations made by State agencies. The Division received substantial help in the development of policies and procedures from a committee appointed by the State Vocational Rehabilitation Council, from constituents in the Department—particularly from the Office of Vocational Rehabilitation—and from other departments and agencies. To assist in the development of medical standards and policies, a Medical Advisory Committee to the Social Security Administration was appointed. This Committee, composed of members of the medical and related professions having a common interest in the problems of the disabled, provided consultation on medical policies involved in making disability determinations and technical advice on the formulation of medical guides and standards. The Medical Advisory Committee is expected to continue beyond this initial year of operations to evaluate the medical aspects of the administration of the freeze and will assist the Bureau in preparing medical policies and procedures and in solving problems that have medical content.

A major phase in preparing to administer the freeze was the negotiation of agreements with individual States to make determinations of disability. The Governors of all States were asked to designate an appropriate agency or agencies for this purpose. At the end of the fiscal year, designations had been received from all but two jurisdictions. In 42 States the vocational rehabilitation agency was designated; in four the vocational rehabilitation agency and either the public welfare agency or a special agency for the rehabilitation of the blind; and in five the public welfare agency. Agreements with 38 States and advances of funds were approved by the Commissioner by the end of the year. Under the law, the State agencies may elect to exclude certain cases from the agreement. In general, cases where disability began many years in the past and cases where the disabled individual is an old-age insurance beneficiary and therefore may be eligible for an immediate increase in benefits were currently excluded from the agreements.

In addition to speeding work on negotiations of agreements and providing State agencies with funds with which to start operations, the Bureau made intensive efforts during the second half of the fiscal year to identify potential applicants and to process freeze applications. District offices identified several hundred thousand potential applicants and accepted 143,000 freeze applications before the end of the fiscal year. Because an old-age insurance beneficiary who had been disabled before he attained age 65 could, through the freeze, receive an increase in his benefit amount beginning with the month of July, priority was given to the securing and processing of applications from these older people.

The 1954 amendments included a statement of policy to the effect that disabled individuals applying for a determination of disability under the freeze should be promptly referred to State vocational rehabilitation agencies for rehabilitation services, to the end that the maximum number of disabled individuals may be restored to productive activity. To carry out this policy, the Bureau, early in the fiscal year, began describing the services available under State vocational rehabilitation programs to each disabled person inquiring about the freeze. Concurrently, contacts were made with State rehabilitation agencies to work out arrangements for making prompt and effective referrals. As these arrangements were completed State agencies began receiving information on many thousands of disabled individuals, including many who were not freeze applicants. Although it is too early to assess accurately the substantial values that will result from this process, experience thus far has shown that a large proportion of the disabled persons referred were not previously known to vocational rehabilitation agencies.

The Division of Disability Operations began making tentative determinations on cases in March. About 62,000 applications were received in the Division before the close of the fiscal year. Although only a scattering of determinations had been completed by State agencies, the volume will grow rapidly as the agencies become staffed and trained.

In July 1955 the benefit checks of more than 13,000 old-age insurance beneficiaries were raised as the result of the freeze; additional cases were in process. The average July rise was \$10.43 (in some cases a portion of the increase was attributable to the drop-out provision in the 1954 amendments). Dependents of old-age insurance beneficiaries entitled to the freeze received proportionate increases in their benefits.

OTHER ADMINISTRATIVE DEVELOPMENTS

Several years of detailed research have gone into the study of the possible application of large-scale electronic data-processing equipment to the Bureau's earnings record operation. Studies culminated this year in the selection of data-processing equipment which will be installed in the latter part of fiscal year 1956 for maintaining earnings records and for properly crediting earnings items reported incorrectly by employers. This equipment, using magnetic tape to record earnings information, will eliminate the setting up of a second summary punchcard file for approximately 80 million accounts on July 1, 1956, which would otherwise have been necessary in order to include the additional data required by the 1954 amendments in making benefit computations. In addition, its use in the operation to properly credit incorrectly reported earnings items will reduce the number of items that cannot be credited and will cut the cost of the operation substantially. Within a year after initial installation, the use of the equipment will be extended to the Bureau's statistical operations, where increased efficiency will result.

Another major subject of study over the past several years has been the plan to combine social security reporting with reporting for income-tax withholding purposes. Under that plan the quarterly wage reports now filed for social security purposes would be eliminated for those employers whose employees were also subject to income-tax withholding. The withholding-tax statements (Forms W-2) filed by the employer once a year for each employee would be used to maintain the wage records necessary in the old-age and survivors insurance program. Under agreement with the Treasury Department, the copies of the Forms W-2 filed by employees with their income-tax returns would also be sent to the Bureau of Old-Age and Survivors Insurance for withholding-tax verification purposes.

The plan is expected to reduce the reporting burden of employers (about 200 million wage items would be eliminated), to provide an automatic method whereby employees may verify annually the accuracy of reports of their earnings under old-age and survivors insurance, to effect improvements in efficiency in the Government's processing operations, and to strengthen social security tax and withholding tax administration.

Adoption of legislation to carry out the proposal has been recommended by the President and a bill (H. R. 7770) embodying the plan has been introduced in the House of Representatives.

In September 1952, the House Appropriations Committee initiated studies of the possibility of check writing by benefit payment agencies to replace the current practice of certification by agencies and disbursement by the Treasury Department. Subsequent to experiments by the Railroad Retirement Board, the Bureau of Old-Age and Survivors Insurance with the Treasury Department and the General Accounting Office studied possible applications of this procedure to the old-age and survivors insurance area offices. As a result of these studies the Bureau's Birmingham Area Office in July 1955 assumed the responsibility, on an experimental basis, for writing benefit checks.

In the 1956 appropriations bill the Congress authorized expenditure of \$3,870,000, in addition to amounts previously authorized, for a building to house all of the Baltimore operations of the Bureau, and also authorized the use for construction of funds previously authorized to be used in preparing for construction and not required for that purpose. The limit of cost as established by this congressional action is \$25,370,000. During the year the Government acquired title to the site for the building, on the outskirts of Baltimore.

Financing the Program

In setting the schedule of contribution rates in the 1954 amendments Congress again made clear its intent that the old-age and survivors insurance program is to be self-supporting from contributions of covered workers and employers. The rates in the schedule were arrived at after careful review of long-range actuarial cost estimates. According to these estimates, the level-premium cost of the program after 1952 on an intermediate basis, assuming interest at 2.4 percent and earnings at the levels that prevailed during 1951 and 1952 (the latest then available), was 7.50 percent of payroll. The level contribution rate equivalent to the graduated rates in the law was estimated at 7.12 percent of payroll, so that there was an estimated deficit of 0.38 percent.

Revisions in these estimates have recently been prepared that take into account the rise in earnings levels since 1951-1952 and the most recent coverage and benefit experience. According to these new estimates the level premium cost of the program after 1955, on an intermediate basis and assuming 2.4 percent interest, is 7.51 percent. The level contribution rate equivalent to the graduated contribution rates in the law is estimated at 7.29 percent, with a resulting deficit of 0.22 percent. Thus the new estimates show that the deficit has been significantly reduced. Taking into account the practice of using contribution rates rounded to convenient fractions, the system is as nearly in balance as is practical.

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, or earnings had been used, different results would have been obtained. Accordingly, no one set of estimates should be looked upon as final. As economic and other conditions change, the Department will continue to prepare new cost estimates reflecting the latest information available.

A Study of the Minimum Benefit

Public Law 761, the Social Security Act Amendments of 1954, contained the following section calling for a study of the minimum benefit under the old-age and survivors insurance program:

Sec. 404. (a) The Secretary of Health, Education, and Welfare shall conduct a full and complete study with a view to determining the feasibility of increasing the minimum old-age insurance benefit under title II of the Social Security Act to (1) \$55 per month, (2) \$60 per month, and (3) \$75 per month.

(b) Such study shall include (1) a detailed analysis of the estimated increase in cost, if any, involved in increasing such minimum benefit to each of the above referred to amounts, (2) estimates of the financial impact such increase would have upon the Old-Age and Survivors Insurance Trust Fund, and (3) an estimate of the amount, if any, by which Federal grants to the States for public assistance would be reduced by reason of such increase in minimum old-age insurance benefits.

(c) The Secretary shall report to the Congress at the earliest practicable date the results of the study provided for by this section.

In accordance with this directive a study of the feasibility of increasing the minimum benefit to the specified amounts was conducted during the fiscal year 1955. The study included, in addition to the required analysis of costs and of the impact on Federal grants for public assistance, an analysis of the relationship of the proposed increases to employment patterns, earnings, and benefit levels of workers and of beneficiaries with a view to determining who would benefit

from, and who would be disadvantaged by the proposed increases in benefits and cost.

In connection with the study, estimates were prepared of the benefits that are expected to be awarded under the program in the next 5 years. It is anticipated that about 80 percent of the benefits awarded to retired men workers during that period will be based on earnings after 1950 and will reflect the changes in the program, described earlier, that are expected to improve benefit adequacy. Among these retired male beneficiaries whose benefits are based on earnings after 1950 only 6 percent are expected to qualify for less than \$60 a month; over 80 percent are expected to receive benefits between \$75 and \$108.50.

The study was completed and a report on the study was submitted to the Congress shortly after the end of the fiscal year. The conclusions reached in the study, as summarized in the report, are as follows:

... the proposed increases in the minimum would result in appreciable increases in the cost of the old-age and survivors insurance program. The increase in cost on a level-premium basis for the \$55 minimum would be 0.6 percent of payroll; for the \$60 minimum, 0.9 percent; for the \$75 minimum, 1.8 percent.

With a \$55 minimum the savings in Federal grants to States for old-age assistance would amount to about 4 percent at present and about 8 percent in 1960. The comparable figures for a \$75 minimum would be 10 percent now and somewhat under 19 percent in 1960. The additional expenditures for old-age and survivors insurance in 1955 would amount to from 5 to 7 times the reduction in the Federal share of assistance costs; for 1960 from 8 to 11 times.

Those who would benefit from the proposed increases in the minimum, aside from those people now on the rolls, would be widows whose husbands died before the recent improvements in old-age and survivors insurance, families where the wife had barely enough covered work to be insured, and people who had spent most of their lives outside of covered work such as doctors, lawyers, Federal employees, and investors. In addition there would be some regular lifetime workers in low-wage areas, such as Puerto Rico and the Virgin Islands, or in farming, with its low cash wage and considerable remuneration in kind. The chief group that would be hurt by reason of paying additional contributions without any benefit increases would be the regular, full-time, lifetime workers who supported themselves and their families throughout their lives by work in covered jobs.

It would seem very difficult to justify to the long-term contributors to the system, who even under present law receive less in proportion to their contributions than do the short-term contributors that they must pay still higher contributions to help finance benefit increases for others while not getting additional benefits themselves. Especially would this be true when it is considered that among those who would receive the increased amounts would be self-employed doctors and lawyers, Federal workers, investors and others whose major source of support—income from noncovered work or investments—is not subject to the taxes that support the program.

Thus the provision of high minimum benefits not only would increase the cost of the program but it might also jeopardize the financing of the program by decreasing the willingness of the long-term regular worker to support the system. In the opinion of the Department of Health, Education, and Welfare there are values inherent in the contributory, variable-benefit system that make it most important that no step be taken, however expedient it may seem in the short run, that would weaken the financial basis of the system.

Legislative Developments in 1955

A bill (H. R. 7770) to consolidate reporting of wages for income-tax withholding and social security purposes was introduced in the House of Representatives shortly before the first session of the Eighty-fourth Congress adjourned. Since quarterly reports of earnings would not be made under the plan for workers covered by the income-tax withholding procedures, the bill provides for changing the insured status requirements under the program from the present quarterly basis to an annual basis.

H. R. 7770 also includes a provision under which the Federal old-age and survivors insurance trust fund would earn a higher rate of interest on its investments. The law now requires that special obligations issued to the trust fund bear interest at a rate equal to the average rate of interest borne by all interest-bearing obligations of the United States forming a part of the public debt. (When the average rate is not a multiple of $\frac{1}{8}$ of 1 percent, the rate of interest is the multiple of $\frac{1}{8}$ of 1 percent next lower than the average rate.) In determining the interest rate under this rule all obligations, including very short-terms ones, are included. Yet the financial commitments of the system are basically of a long-term nature and it is appropriate to take that fact into account in arriving at a rate of interest that is equitable. Under H. R. 7770 the interest rate on special obligations issued to the fund would be the average rate of all marketable United States Government obligations having maturity dates more than 5 years after issuance; thus short-term obligations would not be considered. The bill also provides that the average rate would be rounded to the nearest (rather than the next lower) multiple of $\frac{1}{8}$ of 1 percent.

Late in the first session, the House of Representatives passed H. R. 7225, a bill that would lower the retirement age to 50 for insured individuals who are permanently and totally disabled, reduce the benefit eligibility age for wives, widows, female parents, and women workers to 62, continue monthly benefits for disabled children after age 18, extend old-age and survivors insurance coverage to self-employed professional people not yet covered (except doctors) and a few smaller groups, increase the contribution rates, and establish an Advisory Council on Social Security Financing. Time did not permit full consideration of the measure by the Senate. The Department endorsed the extension of coverage provided by the bill but stated that the other provisions required study and evaluation more extensive than could be provided during the closing days of the 1955 session of Congress.

After a number of months of intensive study and public hearings, the Select Committee on Survivor Benefits of the House of Representatives (the Hardy Committee) reported out a bill, H. R. 7089, that was passed by the House on July 13, 1955. The Senate Committee on Finance is expected to consider the bill at the next session of the Congress. This bill would make major improvements in the survivor benefit programs for servicemen, including extension of contributory old-age and survivors insurance coverage to members of the Armed Forces and coordination of the survivor benefits payable by the Veterans Administration with those that would be provided by old-age and survivors insurance. The bill would substantially carry out the recommendations of the President and of this Department that coverage be extended to members of the uniformed services on a contributory, wage-related basis.

H. R. 7089 includes provision for reimbursement of the Federal old-age and survivors insurance trust fund for past and future expenditures resulting from the gratuitous \$160 monthly wage credits which are provided under existing law for military service performed since September 15, 1940.

When it became evident that Senate consideration of H. R. 7089 could not be completed in 1955, the Eighty-fourth Congress enacted Public Law 325 as a stop-gap measure. This law extended the expiration date of the gratuitous \$160 monthly wage-credit provision from July 1, 1955, to April 1, 1956. If H. R. 7089 is enacted to provide contributory coverage of the Armed Forces effective January 1, 1956, the social security law will need to be amended so that the \$160 gratuitous credits will not be granted for military service after 1955.

In addition to the significant developments that occurred during the year in respect to improved retirement and survivors protection for members of the Armed Forces, the President took steps to improve veterans' legislation by establishing the President's Commission on Veterans' Pensions, with General Omar N. Bradley as Chairman. At the President's direction, this Commission began a comprehensive study of the Federal laws providing nonmedical benefits to veterans and their dependents, including the relationship of these benefits to benefits provided under the social security and other general programs, as a basis for recommendations to be submitted to the Congress. The Department was asked to furnish information about the present and potential effects of the old-age and survivors insurance program and others administered by the Department on veterans.

Amendments to the Railroad Retirement Act were approved August 12, 1955. These amendments made no basic changes in the coordination of the railroad retirement and old-age and survivors

insurance programs; however, they did remove the former requirement in the railroad law that survivor annuities be reduced by the amount of any old-age and survivors insurance benefit (based on a different wage record) payable to the annuitant.

Some progress was made during the year toward carrying out the recommendation of the Committee on Retirement Policy for Federal Personnel that old-age and survivors insurance coverage be extended to employees covered by the Federal civil service retirement system and that the latter system be revised to be supplementary to old-age and survivors insurance. The Department of Health, Education, and Welfare believes that the recommendation, if carried out, would substantially improve the protection afforded to Federal employees.

Public Assistance

The twentieth year of administering public assistance under the Social Security Act was an occasion for taking stock—appraising gains and evaluating needs in planning the future direction of the program.

Gains in Public Assistance

Benefits of the public assistance titles of the act are now extended to the needy aged and blind and to dependent children in all the approximately 3,100 counties in the United States, and in Alaska, Hawaii, the District of Columbia, Puerto Rico, and the Virgin Islands. Nevada, since 1945 the only jurisdiction without a federally aided program of aid to dependent children, passed legislation authorizing the initiation of its program in July 1955. The federally aided program initiated in Maine during the year brought to 43 the States administering aid to the permanently and totally disabled for which Federal grants were provided under a 1950 amendment to the act. In addition, States provide general assistance, using only State and/or local funds.

During the past 20 years the State public assistance programs have undergone great development in their ability to help people meet their needs in ways that are consistent with the dignity of the individual and with respect for his rights and responsibilities. Much of the gain is attributable to implementation of concepts embodied in the public assistance titles of the act reenforced by the knowledge and experience of related fields of economics, law, social work, medicine, and public administration.

For example, placement of responsibility with a single State agency for statewide operation of the program has contributed to the develop-

ment or strengthening of State departments of public welfare throughout the country and provided for equitable administration of assistance to needy people within a State. Although traditional responsibility of the States and localities for administering public assistance was retained, certain provisions in the Social Security Act reflect the national interest, such as those relating to proper and efficient administration and consideration of income and resources in determining need for assistance.

The act also provides for a fair hearing when a needy person has been denied aid or is dissatisfied with the amount of his assistance payment, or when his application has not been acted upon with reasonable promptness. This has protected needy persons against arbitrary or erroneous decisions of an individual staff member and strengthened State responsibility by providing for State review of a local decision.

Most States define a needy person as one whose income and resources are too small to provide what the State has set as the minimum required for basic maintenance needs, and today aid is usually given to supplement any income and resources the applicant possesses up to this standard. However, standards in many States are still far below what many consider necessary to secure the essentials of well-being. Much of the increase in public assistance payments during the past two decades reflects increased living costs. For example, although there was an increase in the average monthly old-age assistance payment from \$15.04 to \$51.89 from 1936 to 1955, the actual purchasing power of today's payment is \$26.58 in terms of the 1936 dollar.

The 1950 amendment to the Social Security Act requiring the designation by each State of an authority to establish and maintain standards in institutions where assistance recipients reside has provided an impetus for a nationwide movement to raise standards of institutional care. There has also been increasing emphasis in administering assistance in such a way as to help the needy person make the maximum use of his capacities for self-help and to deal constructively with problems which have contributed to his need for assistance.

Public assistance has helped to strengthen family life in many ways. By aiding the needy aged, blind, or disabled individual within his family setting, he has been enabled to remain at home without interruption of family life because of need alone. Through aid to dependent children the needy parent and child have been enabled to remain together, and children have been provided the opportunity of growing up in the setting of their own family relationships. Efforts toward rehabilitation of the needy disabled have helped some gain greater self-sufficiency and others to resume responsibility for the care and support of their families. Public assistance, in supplementing the old-age and survivors insurance program, has added to the basic

economic underpinning which has enabled the needy family to preserve, in the face of adversity, the continuity of cherished relationships and other strengths of family living.

Trends in Caseload and Expenditures¹

Nearly 6 million persons (5.8 million) received some form of public assistance in June 1955—3.5 percent of the total population, or approximately 1 in 28. This represented an increase of 200,000 from the preceding June, with the highest increase between November and December. The year's peak of 6.1 million was reached in March. All programs showed increases except old-age assistance.

Expenditures for assistance payments from Federal, State, and local funds during fiscal 1955 amounted to \$2,712 million, representing about 1 percent of personal income payments in the Nation. The Federal share of this expenditure was \$1,351 million. The 5.8-percent increase in total expenditures reflected increases in average payments in each of the assistance programs, owing in part to increasing expenditures for medical care through vendor payments and higher standards of assistance in some States.

OLD-AGE ASSISTANCE

In June 1955, 2,549,000 persons received old-age assistance, a decrease of about 33,800 persons, or 1.3 percent, from the previous June. The greatest monthly reduction, 8,700, occurred in October 1954 when a substantial number of cases were closed following receipt of higher old-age and survivor insurance benefits provided by the 1954 amendments to the act. Only 14 States had higher caseloads at the end of the year than at the beginning. The national average monthly payment for old-age assistance was \$52.30 in June 1955 as compared with \$51.45 a year earlier.

AID TO DEPENDENT CHILDREN

About 620,000 families received aid to dependent children in June 1955, an increase of about 38,500 families, or 6.6 percent, from the preceding June. Increases in caseloads were general throughout the country with reductions in only 7 States. The average payment per family in June 1955 was \$86.78 (\$24.04 per person) as compared with \$85.08 per family (\$23.81 per person) in June 1954.

¹ Caseloads, averages, and total expenditures in all programs except general assistance are based on data including vendor payments for medical care and cases receiving only medical care.

AID TO THE BLIND

Nearly 104,000 persons received aid to the blind in June 1955, an increase of about 3,000 during the year. Only 16 States had fewer recipients, and 11 States had lower average assistance payments at the end of the year than at the beginning. The national average monthly payment in June 1955 was \$57.41, as compared with \$55.80 in the previous June.

AID TO THE PERMANENTLY AND TOTALLY DISABLED

About 236,800 persons in 43 States received aid to the permanently and totally disabled in June 1955, an increase of 25,100 from June 1954, owing largely to the relative newness of the program. The average monthly payment was \$54.93 in June 1955, as compared with \$53.51 in June 1954.

GENERAL ASSISTANCE

Some 310,000 cases received State and/or locally financed general assistance in June 1955, an increase of 11,000 or 3.8 percent from the preceding June. This was a decrease of 71,000 cases from the year's high of 381,000 reached in March. That peak represented the largest number receiving general assistance since April 1951 but was 271,000 under the postwar peak of 652,000 in March 1950. The average payment per case for June 1955 was \$53.78, as compared with \$51.62 a year earlier.

Effect on Public Assistance of the Expanding OASI Program

A 1954 amendment extended old-age and survivors insurance coverage to about 10 million more people in the course of a year (over half of them farm operators and farm workers). This is expected to have a significant long-range effect in reducing the number of aged dependent on assistance, since many come from agricultural groups to which insurance coverage was extended. It is estimated that by about 1980 a very high proportion of the aged will receive old-age and survivors insurance benefits; those who do will need old-age assistance only if their insurance benefits are low or if they have special needs. Some of those not receiving insurance benefits may also need old-age assistance.

However, the immediate effect in reducing the number dependent on public assistance is more limited. Many of those currently receiving old-age assistance never had and are not likely to obtain cover-

age under the insurance program because during their working years the coverage was limited. Others are eligible for only minimum insurance benefits insufficient to meet their basic needs or have unusual expenses, such as costly medical and/or nursing care. As a result, although the proportion of aged population receiving assistance dropped from 22.5 percent in September 1950 to 17.9 percent in June 1955, the rate of reduction was only slightly higher during 1955, the year following the amendments, than in the preceding year (1.3 percent as compared with 1.0 percent).

The liberalized benefits, however, resulted in an average increase of \$5 a month in the insurance benefit payment of aged persons receiving supplementary old-age assistance. A somewhat smaller increase was received by most wives of retired workers and most widows receiving monthly benefits in excess of \$25. Widows' benefits at the previous minimum of \$18.80 were raised to \$30 a month. As a result, although about 86 percent of the aged receiving both assistance and benefits in September 1954 continued to receive assistance, the amount of assistance was reduced; 2 percent of the cases were closed. Aid to dependent children families also receiving benefits had an average increase of over \$8 a month per family. About 73 percent had their assistance payments reduced, and 3 percent of the cases were closed. Payments for the other old-age assistance and aid to dependent children cases were not reduced.

The increase in benefits resulted in a reduction of almost \$2.1 million a month in payments to those receiving both old-age assistance and insurance benefits and \$197,000 for aid to dependent children families also receiving benefits, in September 1954. In many cases, the increase in benefits released some State and/or local funds to meet current unmet need of recipients.

AGED PERSONS RECEIVING BOTH INSURANCE AND ASSISTANCE

In February 1955, about 489,000 insurance beneficiaries received old-age assistance to supplement minimum or near minimum insurance benefits insufficient for their basic needs or to meet special needs. They represented nearly a fifth (19.2 percent) of all old-age assistance recipients. The number receiving both assistance and benefits increased 77 percent since September 1950 and 5.6 percent since February 1954.

As a result of benefit increases provided by the 1954 amendments, the average old-age assistance payment for recipients receiving both insurance and assistance was reduced from \$43.00 in February 1954 to \$40.92 in February 1955. Aged beneficiary-recipients get, on the average, a lower benefit and a lower assistance payment than those receiving only insurance benefits or only assistance payments. For

recipients who were not drawing insurance benefits, the average old-age assistance payment was \$54.20.

FAMILIES WITH CHILDREN RECEIVING BOTH INSURANCE AND ASSISTANCE

More than 32,000 families received both insurance benefits and assistance in February 1955—5.2 percent of the families receiving aid to dependent children in February 1955 in comparison with 5.9 percent a year earlier. Since only 1 family in 6 receives assistance because of the death of a parent—the risk covered by the insurance program—the aid to dependent children program is affected to a more limited extent by expansion of insurance coverage and liberalization of benefits.

The average assistance payment in February to families receiving both types of benefits was \$66.71; to families not receiving insurance benefits the average assistance payment was \$87.17.

Program Developments

The need for welfare services, in addition to financial assistance, has been increasingly recognized as illness and disability became major factors contributing to dependency, and the relatively large number of families receiving aid because the father has deserted gave evidence of social problems on which further help is needed. Increased emphasis was given to the broad purpose of public assistance—helping needy persons through the provision of income and services to achieve as much economic and personal independence as possible.

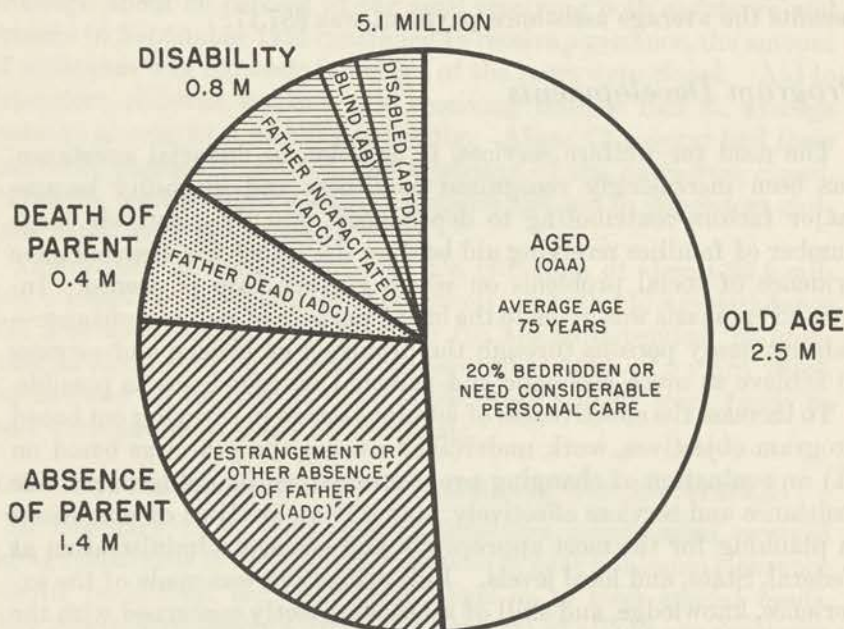
To increase the effectiveness of administration in carrying out broad program objectives, work undertaken during the year was based on (1) an evaluation of changing program needs in planning to provide assistance and services effectively; and (2) an analysis of operations in planning for the most appropriate and efficient administration at Federal, State, and local levels. Full utilization was made of the experience, knowledge, and skill of all those directly concerned with the administration of the program—State and local public assistance staff, regional and central office staff of the Bureau, and those in other agencies and organizations both within and outside the Department. This was evidenced, for example, by requesting and utilizing State consideration of policy material in early developmental stages; joint participation of Federal, State, and local staff in projects in specific subject areas; wide regional and central office participation in work planning; and utilization of technical and lay advisory groups in evaluating program needs and legislative proposals, detailed below.

Five major areas were identified on which Bureau work was focused during the year: (1) improvement in services to needy individuals; (2) increased understanding of the public assistance program through citizen participation; (3) improvement in public assistance administration; (4) improvement in methods of carrying out Federal responsibilities in working with States; and (5) development of the defense welfare services program.

IMPROVEMENT IN SERVICES TO NEEDY INDIVIDUALS

Improvement in services available to needy persons, including both clarification of policy on services and obtaining skilled staff to provide them, was considered the most important problem on which further work was needed.

Chart 2.—MAJOR CAUSES OF DEPENDENCY OF PUBLIC ASSISTANCE RECIPIENTS,¹ 1955



¹ Excludes general assistance recipients under State and local programs.

Need for welfare services.—Dependency of one and a third million persons receiving federally aided assistance today is attributed primarily to disability, chronic illness, or severe infirmities of old age. In addition, absence of a parent accounts for need in more than half of the 620,000 families continuing to receive aid to dependent children. As shown in chart 2² nearly a fifth of the aged receiving assistance—

² These data were obtained through studies, undertaken by the Bureau with participation of State public assistance agencies, of the characteristics of recipients of old-age assistance, aid to the disabled, and aid to dependent children; and more recently through participation in the study of the homebound made by the Office of Vocational Rehabilitation at the request of Congress.

some 460,000 persons—are bedridden or require a substantial amount of care from others because of physical or mental impairment; 235,000 persons receive aid to the permanently and totally disabled; more than 100,000 persons receive aid to the blind; and 450,000 persons in 125,000 families receive aid to dependent children because of need due to the incapacity of a parent. In addition, a high proportion of the other 2 million aged caring for their own daily needs have health and other problems relating to aging; their average age is 75 years.

The aging, the largest group receiving public assistance, have need for many types of services. In addition to a high incidence of chronic illness, the aging suffer from the loss of family ties and friends, from lack of recreational outlets, and from frequent lack of employment opportunities irrespective of skill or physical vigor. Many need help in getting medical care, in devising arrangements to maintain their own homes as long as their health permits, and in obtaining suitable institutional care if and when needed. Others can benefit from skilled help with personal family problems. Estranged husbands and wives might be reunited and the deserting parent helped to resume the responsibilities and satisfactions of family living, with benefit to the children. Undoubtedly, more old people can be enabled to make greater use of their individual capacities and thus participate in and contribute more effectively to family and community life.

Some recipients of public assistance who now require considerable care from others because of age or disability could be helped to learn how to care for themselves, thus providing the individual with a greater degree of independence and releasing the time of others in the family for more productive pursuits. The use of homemaker service would enable some older people to maintain their own homes for a longer period than would otherwise be possible. Vocational rehabilitation and other services might help others among the younger groups who receive public assistance to engage, as many would like to, in some gainful work.

Emphasis on welfare services.—Federal and State interest was intensified during the year in coordinating welfare, medical, vocational, and other services with financial assistance to help needy persons become self-sufficient to the full extent of their capacities. The Bureau of Public Assistance worked with other Bureaus in the Department and with national voluntary social agencies in planning for the development and utilization of other needed community resources in order to make available to public assistance recipients services that will contribute to the improvement of their capacity for self-help or self-care.

Interest in welfare services was stimulated by the release of the draft report on services in the aid to dependent children program developed by the working group composed of staff from both the

Children's Bureau and the Bureau of Public Assistance. The report was sent to all State public assistance and child welfare agencies and provided a basis for joint study of the need for services in general and the specific needs in the aid to dependent children program. On the basis of joint planning by regional staff of both Bureaus, seven regional conferences including 38 States were held during the year. These were attended by administrators, program supervisors of aid to dependent children and child welfare services, and in some instances by other State and local staff. The report was discussed individually with the other States and Territories. Similar group discussion has been held in the Bureau's central office and regional offices, with full staff participation. The regional staff of both agencies is continuing to encourage, among State and local staff, wider group discussion of concepts in the report and the further exploration, testing, and development of the quality of the job now being done.

The Bureau is attempting to give encouragement to the work already being undertaken in the expansion of needed services over the country by State and local governments, private organizations, and others interested in the welfare of people. It has especially continued its participation in the activities of many groups in stimulating the development of needed services for the aged.

The Bureau is represented on the Department of Health, Education, and Welfare's Committee on Aging, which is concerned with broad needs of the aging population and how the programs of the constituent units of the Department may cooperate in meeting them. The Bureau continued its collaboration with the National Social Welfare Assembly's National Committee on Aging. A Bureau staff member led one of the workshops at the Assembly's Annual Meeting and is also chairing a committee to advise on the development of a pamphlet on agency examples of casework services for the aging. Participation has also continued on the American Public Welfare Association's Committee on Aging.

A cooperative project during the year was a joint meeting between the Bureau and the Office of Vocational Rehabilitation, attended by several State administrators of public assistance and vocational rehabilitation programs and a selected regional representative from each constituent. This conference provided opportunity for comment and suggestions on ways to make more helpful to State agencies the document on "Working Together To Rehabilitate the Needy Disabled," developed and planned for joint release by the two Bureaus.

The Bureau also participated with other groups concerned with improved coordination between voluntary and public agencies in providing casework services, including the Family Service Association of America and the National Social Welfare Assembly's Conference

on Individualized Services. Similarly, work with the National Legal Aid Society was initiated in identifying needs of public assistance recipients and encouraging State and local agencies to participate in the development of legal aid services.

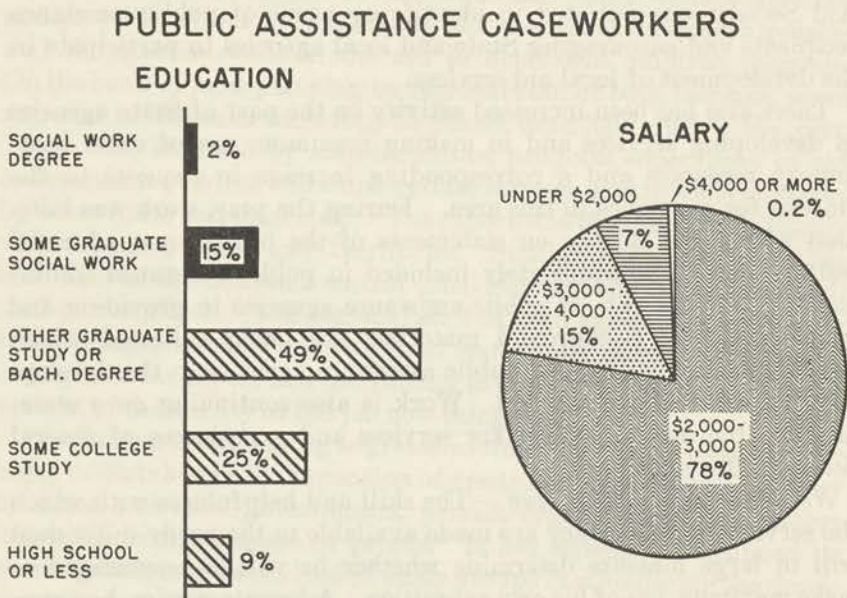
There also has been increased activity on the part of State agencies in developing services and in making maximum use of other community resources and a corresponding increase in requests to the Bureau for assistance in this area. During the year, work was initiated within the Bureau on statements of the broad areas of social welfare services appropriately included in public assistance administration and the role of public assistance agencies in providing and securing them. Background materials are being collected which reflect recent experience of public assistance agencies in the development of constructive services. Work is also continuing on a statement on the use of homemaker services and experiences of several States in this area.

Need for more skilled staff.—The skill and helpfulness with which the services of the agency are made available to the needy individual will in large measure determine whether he will be encouraged to make maximum use of his own capacities. Adequate service, however, depends largely on the technical skill of staff. Public agencies generally have been unable to establish qualifications and salaries for staff at a level that will assure the professional skill needed. Through staff development programs, State public assistance agencies in many instances have enabled untrained workers to improve the quality of service provided. Professional training, however, is needed to assure that skilled services are provided to needy persons in order to achieve the full objectives of the public assistance programs.

As indicated in chart 3 less than 2 percent of public assistance staff in casework jobs had full social work training—2 years of study in a graduate school of social work. Yet public assistance staff was responsible in 1955 for dealing with nearly 6 million persons dependent on public assistance, many of whom had serious individual and family problems. Although an additional 15 percent of the caseworkers had some social work training, more than two-thirds of these had less than 1 year of training. The largest number, 49 percent, had only undergraduate college training, or graduate training in other fields, and about 9 percent had only high school training or less.

The low salary of these caseworkers, averaging \$2,569 in 1950, even though increased since, has contributed to both the inability to secure professionally trained workers and the high rate of turnover of public assistance personnel. In 1954, for example, more than a fourth of all persons leaving public assistance casework positions had been in their jobs less than 1 year; the educational qualifications of those leaving

Chart 3.—EDUCATION AND SALARY OF PUBLIC ASSISTANCE CASEWORKERS



Source: *Public Social Welfare Personnel* (1950), Bureau of Public Assistance and Children's Bureau, 1953.

were slightly higher than those of the new workers recruited. With only 15 percent of the jobs paying over \$3,000 in 1950, public assistance cannot compete for the limited supply of trained social work staff available in the country or induce young people to seek such training.

In the consultation provided individually to 22 States and to groups of States in 6 regions during the year, emphasis was placed on evaluating current staff development programs and on long-range planning to provide for continuing progress in ways and means of improving the quality of agency services. A subcommittee of the Committee on Personnel and Training advisory to both the Bureau of Public Assistance and the Children's Bureau will participate in the formulation of criteria for States to use in their long-range staff development planning.

Case records and recruitment materials were distributed to the States to facilitate their work. Recordings and films, including two new Arizona films—"Rehabilitation of the Blind" and "The Rehabilitation Team in Action"—and "Family Affair," produced by the Family Service Association of America, were also made available on loan. The Bureau has also worked with the American Public Welfare Association's Committee on Social Work Education and Personnel which has been active in a variety of areas concerning the education and standards for personnel in public welfare agencies.

The Bureau has also continued cooperative work with the Council on Social Work Education, primarily on development of recruitment and teaching materials on administration and supervision and on curriculum content. In an effort to improve the quality of public welfare services, the Council has recently obtained a grant from a private foundation for a 3-year study, beginning August 1, 1955, on educational preparation needed for public social services.

Emphasis was also placed on following up recommendations made by the Committee on Personnel and Training meeting in June 1954. The committee meeting in June 1955 recommended that continued effort be placed on developing more adequate plans for financing the education of public assistance staff and expansion of teaching facilities in schools of social work.

INCREASED UNDERSTANDING OF THE PUBLIC ASSISTANCE PROGRAM THROUGH CITIZEN PARTICIPATION

Effort was made during the year to extend understanding of the public assistance programs through planning for increased use of citizen participation in its administration. Exploratory work initiated last year in planning for the use of volunteers to supplement agency services for recipients and to increase understanding of the public assistance programs was continued during the year, with the help of an experienced volunteer. Review was made of selected volunteer programs currently in operation; interpretive material was provided on the value of volunteer service in a public welfare agency; and criteria were developed concerning the provision of supplementary services by volunteers.

The role of Federal, State, and local governments in furthering citizen participation in providing supplementary services was considered by an ad hoc advisory committee, including representatives from North Carolina, New York, the District of Columbia, Ohio, and Kansas, and staff of the American Public Welfare Association and constituent units in the Department. A report of this meeting was distributed to participants of the committee and will be sent to State agencies.

Consideration was also given to other aspects of citizen participation in public assistance administration, especially through membership on local administrative and advisory boards. Material was prepared for State use on the functions of boards in public assistance administration. This included detailed information about boards currently functioning in public assistance programs throughout the country and recommendations for consideration of proposed changes in State public assistance legislation concerning types of boards, their functions, size, method of appointment, and qualifications and terms of office of members.

IMPROVEMENT IN PUBLIC ASSISTANCE ADMINISTRATION

To improve the quality of administration and service of the public assistance program, study has been made of many phases of Federal, State, and local operations. Reshifting of workload necessitated by reduced appropriations and changing program objectives resulted in reappraisal and further streamlining of Bureau functions to enable it both to assure that provisions of the Social Security Act are carried out in practice and to develop materials and provide consultation in the welfare services area. Regional and central office staff participated in this reappraisal, which resulted in recommendations for a series of improvements subsequently used as the basis of further work planning. A time study of regional office activities was also initiated early in the year. Some progress has also been made in simplifying and achieving increased integration in work planning and related reporting of the regional offices.

Analysis was made of variations among States in the cost of administering the public assistance programs and the factors causing the variations. Policies and operations which appear to have resulted in differences in the average caseload per visitor were analyzed, since this factor accounted for about three-fourths of the interstate variation in costs. State agencies furnished much of the basic information for this study and a committee, representing States with high, medium, and low administrative costs, participated in exploring the various factors affecting cost variations.

Study was also initiated on facets of administration of large urban welfare agencies which present special management problems because of their size and volume of assistance and services provided. Representatives of State agencies responsible for the administration of public assistance programs in the six largest cities in the country met with Bureau staff to consider problems of administrative management and State supervision resulting from local agency size and urban setting. Discussion focused on methods for carrying out the State supervisory function, staffing patterns, workloads, and other factors affecting the costs of administration.

Reviews of State and local administration were conducted by Bureau staff in 25 States with focus on consideration of eligibility determination and correctness of amount of payment in 20 States. In the others, one or more of the following subject areas were examined: State supervision of local operations, hearings, relatives' responsibility, operation of the State review team, and promptness in applications. Findings were discussed with the responsible State officials, and summaries of review findings were prepared for administrative use in the Bureau.

Consultation and other help was provided to State agencies on many management subjects, including surveys of administrative and fiscal procedures, planning for operational changes, development of management guides for local staff, appraisal of the work of special investigating units, distribution of illustrative State materials on manuals and other types of written instructions, and methods for State determination of workloads and staff for local agencies. Developmental work by Bureau staff continued on fiscal provisions of State operations; principles governing Federal financial participation in the costs of office space, medical care, welfare services, defense activities, and administrative costs for several States; fiscal accountability by State agencies; case recording; and measurement of the quantity and quality of the visitor's job. Bureau staff participated in sections on management problems in State conferences, American Public Welfare Association regional conferences, and other meetings on this subject.

Legislative proposals.—Although no Federal legislation pertaining to public assistance was passed in fiscal 1955, study of program needs led to legislative recommendations included in H. R. 3293 introduced on January 31, 1955. Bureau staff participated in the preliminary work done on these legislative proposals by a task force including representatives of interested constituent units within the Department. The task force appraised the need for legislation, defined possible areas for action, and made estimates of their cost. The legislative proposals were reviewed by the executive committee of the American Public Welfare Association, including State public welfare directors, and leaders of voluntary groups invited by the Secretary to advise Department officials on matters requiring legislative action.

IMPROVEMENT IN METHODS OF CARRYING OUT FEDERAL RESPONSIBILITIES IN WORKING WITH STATES

Attention was also directed toward improvement in methods of working with States. Effort was made to clarify Federal and State responsibilities, identify principles in working relationships with States, determine the best way to present Federal requirements to States, and distinguish between these requirements and the objectives toward which States may work in bringing about improvement in program administration.

Sections of the Bureau Handbook of Public Assistance Administration dealing with Federal and State responsibility, sent to State agencies in draft form, provided a vehicle for joint consideration of Federal requirements in general, and specific aspects of Federal and State working relationships. Reports of regional staff discussions

with State agencies were compiled and used in the reappraisal made of Bureau functions. Other sections of the Handbook were prepared dealing more specifically with the responsibilities of a single State agency and the statewide operation of the public assistance programs, based on requirements in the act.

Review was also initiated of Federal requirements affecting State administration of public assistance programs. Effort was made to identify principles and criteria pertinent to such a review, and to identify Federal requirements around which problems have arisen or otherwise are in need of further consideration or revision.

DEFENSE WELFARE SERVICES

Responsibility for planning national emergency financial assistance and clothing programs was included in the delegation by the Federal Civil Defense Administration to the Department. This delegation was made so that these civil defense activities, as well as others, would be built into and become part of the normal functions of government. Following assignment of these programs to the Social Security Administration, responsibility was given to the Bureau of Public Assistance in December 1954, since the network of public welfare agencies throughout the country, with facility for extending assistance and services to people in need of them in every community, provided both the framework for integrating the newly developing program and the basic principles and methods to be used in dealing with people in time of stress.

In carrying out its defined responsibility for developing technical guidance for States and directing Federal activities concerned with financial assistance and clothing for the temporary relief or aid of civilians injured or in want as a result of attack, the Bureau has been working through State public welfare agencies and is utilizing the advice and counsel of State agency staff, as it does in other programs for which it is responsible.

A series of meetings were held with regional and State public welfare agency staff in eight regions to discuss proposed plans, policies, and procedures for the two programs. This series of meetings followed consultation with a committee of State administrators. Other activities included the establishment of a Defense Welfare Services staff within the Bureau; organization and training of this staff; preparation of a memorandum of understanding between the Department of Health, Education, and Welfare and the Federal Civil Defense Administration; conferences with clothing industry representatives and other clothing specialists; and analysis of State civil defense plans.

Children's Bureau

The Children's Bureau was created in 1912 by an act of Congress to investigate and report upon all matters pertaining to the welfare of children and child life among all classes of our people. In 1935 the Children's Bureau was given the additional responsibility of administering the grants to the States provided under the Social Security Act, Title V, to enable them to extend and improve the services for promoting the health and welfare of children, especially in rural areas and in areas of special need.

In recent years the Children's Bureau has directed special attention toward the conditions of life for the infant and preschool child. Its efforts in this direction were continued during 1955 through its research studies and the interdependent child health and welfare programs, implemented in part by grants to the States for maternal and child health, crippled children, and child welfare services.

The Children's Bureau placed special emphasis, during 1955, on bulwarking opportunities for development for the older child. "The Adolescent in Your Family," a bulletin for parents, was published and widely distributed. Technical assistance was strengthened for the State and local coordinating committees for children and youth in which the young people themselves are active. A Division of Juvenile Delinquency Service was established within the Bureau to provide technical consultation to States and communities on the prevention and treatment of juvenile delinquency.

Some Facts and Figures About Child Life

The number of live births in 1954 exceeded 4 million, reaching a new all-time high. The estimated birth rate, 25.3 per 1,000 total population, is close to the highest in the past 30 years.

The U. S. child population under 18 years increased from 47 million in 1950 to about 54 million in 1954, a 15-percent rise. Between 1954 and 1965, the number of children under 18 years is expected to rise by almost 25 percent to a total of 67 million in 1965. In this period the 10-to-17-year-olds will increase by about 50 percent as the large number of children born in the late 1940's and early 1950's enter this age group. In 1952, 42 percent of the children in the United States were living in rural areas.

The infant mortality rate for the first 11 months of 1954 was estimated at 26.6 per 1,000 live births, the lowest so far recorded. Many of the States continue to show marked deviations from the national average.

About 310,000 infants were prematurely born in 1954. Fifty-eight percent of neonatal deaths and 41 percent of infant deaths were reported as associated with prematurity. In 1952, 4 percent of reported pregnancies which reached 20 weeks or more of gestation resulted in a stillborn infant or death in the neonatal period.

The maternal mortality rate in 1954 was the lowest ever recorded (estimated at 5.3 maternal deaths per 10,000 live births). Maternal mortality has declined without interruption since 1929 when the rate was 69.5 per 10,000. In 1952, over 155,000 births occurred among mothers who were delivered without a physician in attendance. Twenty-three percent of births to mothers in the nonwhite group and 8 percent of births to mothers resident outside of metropolitan counties had no medical attendant at delivery.

In 1952 accidents took the lives of 17,121 children, 1-19 years of age and accounted for 36.3 percent of the mortality of this age group. Mortality due to accidents was highest in the 15-19 age group; the rate was 37.2 per 100,000 children. Cancer has become the leading cause of death due to disease among children 5-19 years of age. Next in importance among all fatal diseases are these: diseases of the heart and acute rheumatic fever among children 15-19 years, acute poliomyelitis in children 5-14 years, and congenital malformations in the preschool group.

The estimated 1,476,000 marriages in 1954 were 4 percent fewer than in 1953. The marriage rate of 9.2 marriages per 1,000 population in 1954 was the lowest since 1933. However, the proportion of married persons in the population, thanks to higher rates in earlier years, is relatively high. In 1954 close to 69 percent of the adult population were married; in 1940 the percentage was 60.

Forty-five percent of the 390,000 divorces in 1953 involved families with children under 18 years of age. About one-third of a million children had their families broken by divorce in this one year.

In 1953, about 2.9 million children under 18 years, or 1 in 20 of the Nation's children, had lost one or both parents by death. This represents a sharp drop from the number of orphans in the country in 1920 when there were 6.4 million orphaned children, or 1 in 6 children, in the population. The decline in the number of full orphans has been particularly striking—from 750,000 in 1920 to about 66,000 in 1953.

An estimated 150,300 children were born out of wedlock during 1952 (54,100 white; 96,200 nonwhite). This number was about 3 percent more than the estimated 146,500 children born out of wedlock during 1951. There were 58,700 unmarried mothers 15-19 years of age, or 39 percent of those who bore illegitimate children in 1952. Of every 1,000 unmarried women between 15 and 44 years, 15.2 gave birth to a child out of wedlock in 1952.

An analysis of children living in institutions, based primarily on data from the 1950 U. S. Census of Population, shows that more than a quarter million children under 21 years of age (260,429) were living in institutions of all types in the United States in April 1950. Almost 23,000 of these children were under 6 years of age. A sizable number were in institutions primarily designed for adults, such as prisons and reformatories, jails or workhouses, and homes for the aged and dependent. Of the 260,429 children under 21 years of age living in institutions of all types, about one-third (95,260) were living in institutions for dependent and neglected children. This represents a decrease of about 34 percent since 1933. For the country as a whole, 81 percent of the 95,260 children were in institutions for dependent and neglected children operated under private auspices.

The U. S. Senate Subcommittee to Investigate Juvenile Delinquency estimated that there are 200,000 to 300,000 boys and girls who run away from home annually in the United States.

Police arrest data reported by the F. B. I. in its Uniform Crime Reports for 1,005 cities show that the arrests of juveniles (under 18) increased 2.3 percent in 1954 over 1953. In 1954, juveniles represented 57.6 percent of all persons arrested for auto theft, 49 percent for burglaries, 44 percent for larcenies.

Statistical data available to the Bureau for 1954 showed the sixth consecutive annual increase in the number of delinquency cases reported by the juvenile courts. An estimated 475,000 children came to the attention of juvenile courts in 1954 because of delinquent behaviour. This number exceeded the previous high experienced during World War II.

Children With Special Needs

The problems of certain groups of children call for special attention. Some of the more serious are: the adolescent in conflict with society, the children of agricultural migratory workers, mentally retarded children, and children in unprotected adoptions.

The Nation as a whole is concerned about juvenile delinquency because of its tragic consequences for the individual young person, its contagion among youth, and its social and economic costs for the community. For the past several years the Children's Bureau has given particular attention to the problems of delinquent children. This emphasis is continuing through the coordinated program of the new Division of Juvenile Delinquency Service (see page 63).

For the country as a whole, it has been estimated that there are many hundred thousand children of migrant agricultural workers. It is difficult for any single State to take responsibility for the health,

welfare, and education of the children in those families since they are on the move so much of the year. Because these children are not residents they frequently do not receive the services that are available to other children in the communities through which they travel.

The Children's Bureau, working with the Office of Education, the Public Health Service, and the Bureau of Public Assistance, is stimulating a pilot project along the East Coast. The purpose of this project is to encourage the 10 States involved in the East Coast migrant stream to do interstate planning for services to migrants so that each State can more easily perform its share of the total job.

The exact number of mentally retarded children is not known, but it is estimated that about 1 person per 100 is mentally defective and that about 750,000 children of school age are of low intelligence. As the birth rate goes up the number of such children increases. At the same time the growing complexity of our society makes their social and vocational adjustment ever more difficult. Parents, doctors, nurses, educators, and social workers are increasingly concerned about the health and welfare of these children. The number of parent groups pressing for action for this special group of children is growing rapidly.

Unprotected adoptions in which children are placed without the benefit of social agency skills is a subject of much study and controversy. Because of the seriousness of the black market in adoptions the Bureau is seeking advice from legal, medical, social work, and other professional groups and from adoptive parents and law enforcement agencies. Conferences with the professional groups were begun in 1955, and the work will be more fully developed in 1956.

Federal Interdepartmental Committee on Children and Youth

The Congress places responsibility upon a number of the agencies of the United States Government for programs which contribute in varying degrees to the social well-being of children and youth. In 1948 the President requested these agencies to form an Interdepartmental Committee on Children and Youth to assist each other in keeping informed about program developments, to work together for greater effectiveness in program planning, and to strengthen working relationships between the Federal Government and the States. This triple assignment has been carried out during the fiscal year 1955 by the regular monthly meetings of the full Committee, the work of its subcommittees, and an informational exchange with the State committees. Twenty-eight Federal agencies are represented on the Committee.

Much of the work of the Interdepartmental Committee goes forward through the activities of subcommittees appointed to deal with special problems which are timely and involve a number of Federal agencies. At present there are seven subcommittees. These are concerned with Children of Agricultural Migrants, Transition from School to Work, Children in the Territories and Islands of the United States, Juvenile Delinquency, Mental Retardation, Care of American-Related Children Outside the United States, and the Business of Being a Parent in This Decade.

The Committee exchanges information with the 53 State and Territorial Committees on Children and Youth. It publishes, irregularly, a newsletter, "What's Happening for Children and Youth," and sends pertinent Federal publications to the State and Territorial Committees. The Children's Bureau furnishes secretarial assistance to the Interdepartmental Committee on Children and Youth.

Programs of the Bureau

RESEARCH IN CHILD LIFE

The Bureau's small research staff, working under the guidelines of a newly developed plan, is helping to carry out the legislative mandate "to investigate and report upon all matters pertaining to the welfare of children." Research on programs for disadvantaged children has been emphasized this year. In addition to its own studies and those conducted jointly with others, the Bureau has sought to stimulate research in child life by other agencies by formulating the questions requiring study and developing research methods and has assisted agencies engaged in such research.

In its technical research, studies of the costs and effectiveness of various programs have received major emphasis. Study subjects included the unit costs of child placement and institutional care of children, methods of evaluative research as illustrated in studies of psychotherapy, and a review of studies on the evaluation of school health services. Improvement in methods of reporting for maternal and infant mortality studies has been stressed as a guide for the preventive programs of the medical profession. Work continued on assembling information about programs and services for mentally retarded children. Throughout the country juvenile delinquency is being studied from both the psychological aspect of the inner motivations of the child and the sociological factors in the environment. In an attempt to bridge the gap between these two approaches, the Bureau conducted a conference of experts from both fields. A report of this conference for use by research workers is in preparation.

Statistical reporting of State expenditures and services under the grant-in-aid programs was improved. A new report on maternal and child health services was developed. Special report forms have been developed which will provide an unduplicated count of the number of children served by public child welfare agencies annually, data on persons granted educational leave from public child welfare programs, and information on the professional training of child welfare workers in the State programs. A reporting system to provide more accurate data on juvenile court cases has been initiated.

As part of its research interpretation activities, the Bureau published *The Adolescent in Your Family* and a revised edition of *Infant Care* and proceeded with a revision of *Your Child From One to Six*. Two supplements of *Research Relating to Children* were issued to help investigators in the field of child life keep informed about studies being conducted in their areas of special interest. More than 1,000 individual letters were written in reply to personal inquiries concerning a variety of problems relating to children.

The research staff provided technical consultation requested by State health departments on studies in areas such as evaluation of child health conferences, health records for children of agricultural migrants, maternal and infant mortality, pregnancy, hospital care of premature infants, use of vital records, and fetal and neonatal wastage. State welfare departments and voluntary organizations were assisted in studies on such problems as unit costs in child placement, independent adoptions of children, delinquency prevention, training school staff development, drug addiction among juveniles, and community services for children.

MATERNAL AND CHILD HEALTH SERVICES

All the States, the District of Columbia, Alaska, Hawaii, Puerto Rico, and the Virgin Islands receive Federal funds to extend and improve services for promoting the health of mothers and children.

The State maternal and child health agencies report that increases occurred from 1953 to 1954 in most maternal and child health services provided. The number of expectant mothers receiving services at prenatal clinics increased from about 178,000 in 1953 to 192,000 in 1954. Mothers receiving postpartum medical examinations also increased.

Well-child clinics provided services for about 1 million infants and preschool children in 1954. One-and-a-half times that number received nursing service through State maternal and child health programs. About 2½ million examinations by physicians and slightly over 3 million dental inspections were provided to school children, who also received over 2 million home and office nursing visits. More than 2 million children were given diphtheria immunizations and

about the same number received smallpox immunizations in 1954. Various other services were also provided to mothers and children.

During 1955 the Bureau analyzed the total expenditures of combined Federal, State, and local funds for the maternal and child health programs in fiscal 1954. This was of particular interest because, for the first time, the States reported the estimated total cost of the program. In previous years, reporting had been limited to expenditures of Federal and of legally required matching funds. Total maternal and child health expenditures for 1954 amounted to over \$53 million, or more than 2½ times the Federal and required matching funds reported in 1953.

To better prepare health personnel for their maternal and child health programs many States carried out institutes and other special training projects. In fiscal 1954, the State agencies spent almost \$250,000 for training programs to improve the skills of professional personnel in the maternal and child health field. In addition, special projects having training as the major objective were maintained by a quarter of the States, with the help of Federal funds. For example: the California State Department of Public Health with the School of Social Welfare of the University of California established scholarships and an internship program for medical social workers interested in public health and medical care programs; the Massachusetts Department of Public Health and the Harvard School of Public Health held a 2-week institute on child growth and development for medical social work teachers; and the special project at the Homer Phillips Hospital in St. Louis for improving training in pediatrics for Negro physicians became a reality.

Increased regional interest in care of the premature infant has developed since Colorado initiated a one-day postgraduate institute program on care of premature and newborn infants for physicians, public health nurses, hospital nurses, and hospital administrators. The team has presented six such programs this year in Colorado and Wyoming. Requests for next fiscal year have been received from other areas in Colorado, Wyoming, Idaho, New Mexico, and Nebraska.

The premature institute program conducted by the Cornell-New York Medical Center continues to prove a popular training opportunity for both physicians and nurses. A total of 109 teams coming from 24 States and Hawaii has attended the institutes between 1949 and 1954.

The following publications relating to maternal and child health were prepared and/or published during the year: *Medical Social Service for Hospitalized Children*; *Children's Shoes and Footwear*; *Nutrition and Health Growth*; *Your Premature Baby*; and *The Child With Rheumatic Fever*.

The Bureau sponsored two conferences on Health Services and Juvenile Delinquency which brought together workers concerned with the various facets of the problem of juvenile delinquency.

CRIPPLED CHILDREN'S SERVICES

All the 53 States and Territories, with the exception of Arizona, are participating in the crippled children's program. The expenditures of Federal, State, and local funds for this program for the fiscal year 1954, totaled more than \$36 million, of which \$11.1 million represented Federal funds. The objective of these programs is to locate children in need of care and provide the means of restoration through diagnosis, medical and surgical treatment, and alleviation of unfavorable social and psychological influences which contribute toward the degree and duration of the disability.

In 1954 an estimated 271,000 children—more children than in any previous year—received physicians' services from State crippled children's agencies. The 1954 total for children served represents an 8-percent increase over 1953 and an increase of 26 percent since 1950. Substantial gains were reported in the number of children receiving clinic service (an increase of 9 percent) and in the number receiving physicians' services through home or office visits (an increase of almost 13 percent). Children served in clinics numbered 221,000 and constituted more than four-fifths of all children under the program; about 48,000 children received physicians' services through home or office visits. Hospital inpatient care was provided to over 43,000 children.

State crippled children's agencies are broadening their programs to include more kinds of handicapping conditions and are experimenting with new types of services. A notable example of this is new approaches to the preschool blind child. The Michigan Legislature has approved a special project of the State department of health to provide more extensive services for preschool blind children and their parents. Indiana is holding an institute for parents of preschool blind children.

There is increasing interest by the State crippled children's agencies in the care of children with amputations. A team for care of these patients has been trained at Duke University and another qualified team is at work at the new rehabilitation center at the University of Louisville. Plans have been made for facilities for amputee children in West Virginia. At Grand Rapids, Michigan, a midwestern amputee training center is opening to serve handicapped children from nearby States. Plans have been worked out cooperatively with the Army Prosthetic Research Laboratory for the production of the improved ARRL hand in children's sizes. Hands, mechanisms, and gloves will be produced and paid for in Michigan and will be available to child

amputees in other States. A service for children requiring upper extremity prosthesis has been established in Los Angeles which will serve children from other States as well as California's own.

CHILD WELFARE SERVICES

Over 280,000 children were receiving child welfare services from State and local public welfare agencies according to a cross-section count on the day of March 31, 1955, as reported to the Bureau. In the 50 States and Territories reporting, 40 percent of the children receiving services were living with their own parents or relatives, 42 percent were in foster family homes, and 18 percent were living in institutions or elsewhere.

In its child welfare services the Bureau consults with State public and voluntary agencies in planning and operating their child welfare program. It also administers the grant-in-aid funds for child welfare services and develops guides, recommendations for practice, and informational materials in relation to the child welfare program as a whole and for specialized services, such as social services to children in their own homes, homemaker services, services to unmarried mothers, and foster family and group care programs.

The marked increase in child population gives all aspects of developments within the child welfare program added importance. The past year has seen some basic changes in administration in several States. Connecticut, which has had a State-operated program for children under 6, enacted legislation to bring responsibility for the care of "neglected and uncared for" children over 6 years of age into the same program. Kentucky, Maryland, and Pennsylvania have consolidated the various statewide public services for children in one program within the public welfare department. Tennessee has given permanent status to the State Commission on Youth Guidance whose early work resulted, this year, in a completely new juvenile court law.

Many State legislatures are showing a greater awareness and concern over the need for increased child welfare funds and are making an effort to find more adequate revenue. Connecticut, New York, Pennsylvania, and Vermont are greatly expanding services and are recruiting additional qualified staff. Michigan has succeeded in legislative efforts to provide grant-in-aid State funds for foster home care to counties on an equalization basis, and both Alabama and Florida are increasing their State funds for child welfare.

Nationwide shortages in personnel, affecting all professions, are reflected in social work. Lack of staff and turnover continue to be outstanding problems for State agencies and all groups interested in child welfare. The Council of Social Work Education, the schools of social work, State and local departments of welfare, and Federal agencies are working together to enrich staff development programs

as a means of developing the competence of existing workers. The States are focusing on increasing supervisory and consultant skills. The Bureau has been helping States strengthen the work of their staffs in casework practice, supervision, policies, procedures, and attitudes through institutes and consultation. Educational leave, made possible through the use of Federal child welfare funds, continues to be a mainstay for the States in developing staff competence.

Among new State projects financed by child welfare services funds are: strengthening of the adoption program under public auspices in Vermont; a forestry camp for older delinquent boys in Maryland; four additional child welfare workers in Cook County, Illinois, to strengthen the public social services with respect to independent placement of children.

Cooperative work with other agencies within the Social Security Administration has included Bureau participation on several inter-bureau committees. These include: the Ad Hoc Working Group on Guardianship with the Bureau of Public Assistance and the Bureau of Old-Age and Survivors Insurance and the interbureau Committee on Common Social Welfare Matters which includes representatives of the Office of the Commissioner in addition to the Bureaus named above.

The Children's Bureau continued its joint planning with the Bureau of Public Assistance on services to children in aid to dependent children families. The document prepared in draft last year was discussed with State agency staff members in conferences under the cooperative leadership of regional child welfare and public assistance representatives.

There have been other evidences of progress in the provision of services to children in their own homes. Massachusetts has passed basic legislation for the protection of dependent and neglected children, with a declaration of policy toward the strengthening and encouragement of family life. The southeastern States are proud of their high percentage of children receiving public casework services in their own homes rather than in institutions or foster homes. Many States are voicing a realization that, if social services for children were adequate, more children could remain in their own homes and delinquent behavior might be greatly reduced.

Social agencies are giving increased attention to those children whom neighbors, the police, and others report for serious abuse or neglect and children whose families may, at first, be reluctant to take advantage of community aids in times of trouble. In addition, special projects to identify and plan for the hard core problem families in the community have been initiated in San Mateo County, California; St. Paul, Minnesota; Washington County, Maryland; and St. Louis and Kansas City, Missouri.

Homemaker service is provided by 104 agencies in 74 cities in 29 States and Puerto Rico. Of these, 83 are voluntary and 21 public. A great many are for services to the aged but a number are devoted to children and their families.

Unmarried mothers present a dual challenge for the Bureau and the State and voluntary child welfare agencies. In the first instance, over one-third of these mothers are themselves adolescents and in need of protection and guidance. Secondly, the babies need to be protected from the special hazards which confront them. The Bureau is taking leadership in exploring the extent of the problem and the contributions which the several professions of law, medicine, and social work can make in safeguarding the mother and child. Basically, the need is for adequate medical, social, and legal services available to the mother under conditions she can accept.

The spotlight has been on adoptions with their tremendous increase from around 16,000 in 1934 to around 95,000 in 1954, approximately half of these being with nonrelatives. The National Conference on Adoptions, held in Chicago on January 26-29, 1955, under the auspices of the Child Welfare League of America and the exploration by the Children's Bureau of the "black market" in babies have contributed to nationwide thinking. In June 1955 the Children's Bureau called a conference of 31 national agencies and organizations directly concerned with the three parties to adoption—the child, his natural parents, and the adoptive applicants. The Bureau has also been working cooperatively with Federal agencies having statutory responsibility for intercountry adoptions and for bringing foreign children into the United States for adoption and care.

Foster care of children, both in foster family homes and institutions, is a heavy responsibility of State public welfare agencies both in terms of numbers of children and expenditure of public funds. The number of children receiving foster family care under public agency auspices increased from 49,000 in 1933 to 114,000 in 1952, or 133 percent; during this same period, the Nation's child population increased 14 percent. The majority of the children receiving foster care are cared for in foster family homes. About 56,000 additional children are estimated to be in foster family care under the auspices of voluntary child welfare casework agencies. An important trend in group care is the development of small group homes in the community for adolescents who cannot take root in foster family homes and children who need temporary shelter. Specialized group facilities are also being developed for emotionally disturbed children.

JUVENILE DELINQUENCY SERVICE PROGRAM

For the sixth consecutive year there has been an increase in the num-

ber of delinquency cases reported by juvenile courts. Public interest in the problem of juvenile delinquency remains at a high level. Newspapers continue to devote considerable space to the problem, and additional funds were provided by Congress to permit the Senate subcommittee to continue its investigations of juvenile delinquency.

Evidence of this general interest is also reflected by activities taking place in the States. In at least a third of the States some action at the State level relating to delinquency has been taken. This has taken the form of new legislation, either relating to the juvenile court statute or the statutes relating to the administrative structure of State agencies providing service to delinquent children, or both, or in the form of studies or surveys of State services for delinquent children.

For the fiscal year 1955 the Congress made a supplemental appropriation of \$75,000 to enable the Bureau to expand its services in the field of juvenile delinquency. On October 6, 1954, the Secretary of the Department authorized the creation of a Division of Juvenile Delinquency Service in the Children's Bureau.

The primary responsibility of the new Division is to provide technical consultation to States and communities relating to the following types of service or care: police work with juveniles; courts and probation services; institutional care for delinquent children including training schools, forestry camps, and detention care; legal aspects of delinquency including legislation, community coordination, and planning for the prevention, control, and treatment of delinquency; group work activities with potentially delinquent gangs; and training programs for personnel, professional and nonprofessional, working with delinquent youth.

Working relations have been established by this Division with many national organizations concerned with juvenile delinquency, as well as with the several Federal agencies carrying some responsibility for its prevention, control, and treatment. In response to State and local requests, consultation has been provided in the areas of training schools, juvenile police services, statewide surveys, State legislation, juvenile courts, and the training of institutional, probation, and police personnel.

The major attention given by the Bureau over the past year in the field of juvenile delinquency is reflected in 9 publications on the subject. Six new bulletins issued were: *Training Personnel for Work With Juvenile Delinquency*; *Parents and Delinquency*; *The Effectiveness of Delinquency Prevention Programs*; *Tentative Standards for Training Schools*; a directory of *Public Training Schools for Delinquent Children*; and a report on the Secretary's National Conference on Juvenile Delinquency held in June 1954. Three more bulletins in preparation were: a revision of *Some Facts About Juvenile Delinquency*; a bibliography on *Juvenile Delinquency: Practice and*

Research; and a report on the Bureau's conference on *Health Services and Dissocial Behavior*.

The Special Juvenile Delinquency Project, which was supported by voluntary organizations and foundations and closely coordinated with the Bureau, was dissolved in July 1955.

INTERNATIONAL COOPERATION

The international program has moved along this year with no radical internal changes in policy or administration. The trend toward increase in the training load in the health field has continued—the Foreign Operations Administration group coming from the less developed countries and the World Health Organization group from both highly developed and less developed countries. In the FOA program in both maternal and child health and social welfare, the grants generally have been for 12 months with 8 or 9 months for academic training in a school of public health or social work, or for graduate work in a school of medicine. The WHO fellows, in general, have been highly qualified persons who have come for a few months of observation of new developments in their fields.

During the year, training programs have been planned for 69 long-term trainees and observers and 133 short-term visitors. Of the 69 long-term trainees and observers, 36 were in the health field as follows: maternal and child health 17, pediatrics 6, obstetrics 3, gynecology and obstetrics 2, nursing 2, other 6; 25 were in child and youth welfare as follows: group work 5, child welfare 5, juvenile delinquency 8, other 7; 8 were in medical social work.

The child health and welfare specialists recruited and back-stopped by the Bureau are contributing to the programs in six countries. The Maternal and Child Health Demonstration in Samawa, Iraq, continues to increase. The Government in Iraq has constructed 3 new buildings on the grounds to handle the increasing number of patients and trainees.

In Egypt the major responsibility of the American maternal and child health physician has been the development of a rural health demonstration with special emphasis on maternal and child health at the village of Shubra Mant, near the Pyramids. Health visitors are being trained for work at the new center.

The medical social consultants, working in El Salvador and Panama, have turned over to local medical social workers the hospital social service units which they had initiated. They are now functioning on a truly consultant basis to the medical social workers in the several hospitals, to hospital administrators, and to health centers. They are active also in the field of social work education and have had teaching responsibilities in connection with the schools of social work in each country.

In Mexico the American consultant nurse-midwife has been working with other nurses on nursing curricula at schools in various parts of the country and has given assistance in the organization of a new division of nursing in the Mexican Ministry of Health and Welfare. She and an American physician were loaned to Uruguay for 2 months when that country had the most severe polio epidemic in its history.

In February the Director of the Division of International Cooperation attended the tenth Pan American Child Congress in Panama as a member of the United States delegation. She also attended the technical conference of Public Health Chiefs of U. S. Operations Missions for the Near East, South Asia and Africa, and the Far East, which was held in New Delhi, India, from February 22 through March 7. She visited the All India School of Hygiene and Public Health in Calcutta. From there she went to Iran, Pakistan, Iraq, Lebanon, Egypt, and Libya, as a consultant on maternal and child health activities of the Foreign Operations Administration program in these countries.

The Chief of the Bureau serves under Presidential appointment as United States representative on the Executive Board of the United Nations International Children's Fund (UNICEF). In May 1955, she was a member of the United States delegation to the World Health Organization Congress in Mexico City.

Federal Credit Unions

During the fiscal year ended June 30, 1955, the aggregate assets of all Federal credit unions exceeded \$1 billion for the first time. The program was 21 years old on June 26. On June 30th, there were 7,562 units in operation. Their 3.8 million members owned assets totaling \$1.1 billion, of which \$767.7 million consisted of loans outstanding to members. Federal credit unions were operating in Alaska, Hawaii, the District of Columbia, the Canal Zone, Puerto Rico, the Virgin Islands, and in each of the 48 States. About 83 percent were serving employee groups in commerce, industry, and government—local, State, and Federal; 15 percent were serving associational groups such as labor unions, churches, and fraternal organizations; and 2 percent were serving residents of small rural communities or residents of well-defined neighborhood groups in urban areas. About two-thirds (67 percent) of those operating on June 30 had assets of less than \$100,000, and more than half (58 percent) were chartered after January 1, 1947.

Between July 1, 1954, and June 30, 1955, the number of operating Federal credit unions increased 572 or 8.2 percent; membership increased 358,378 or 11.2 percent; total assets increased \$203 million or 22 percent; and amount of loans outstanding increased \$145 million

or 23 percent. Outstanding loans to members accounted for 68.4 percent of total assets at the end of fiscal year 1955 as compared with 67.8 percent at the end of fiscal year 1954.

Each Federal credit union is a separate corporation. Each is managed and operated by officials elected by and from the group it was organized to serve. The field of membership of each unit is specifically defined in its charter, and the Federal Credit Union Act specifies that it may provide cooperative thrift and small-loan services only for its members. The Federal Credit Union Act specifies the maximum size of a loan that may be made to a member (\$200 or 10 percent of the credit union's paid-in and unimpaired capital and surplus, whichever is larger); the maximum loan maturity (36 months); and the maximum rate of interest (1 percent per month on the unpaid balances, inclusive of all charges incidental to making the loan). The treasurer of a Federal credit union is the only elected official who may be paid for his services to the credit union. His compensation, if any, must be authorized by the members. Although each unit is authorized to borrow from any source up to 50 percent of its paid-in and unimpaired capital and surplus, borrowing has not been an important source of capital for most Federal credit unions. Funds used to make loans to members are the accumulated savings of members in their credit union. Such savings are called "shares" and are risk capital in the corporate sense of the term.

Program Operations

The Bureau of Federal Credit Unions grants charters to groups that voluntarily apply and are determined to be eligible and qualified under the terms of the Federal Credit Union Act. The Bureau does no promotional work; information and assistance is furnished only upon receipt of a bona fide request. Interest in the organization of Federal credit unions is stimulated by the Credit Union National Association, a nationwide voluntary organization, through advertising and through the efforts of its staff of field men. State credit union leagues, which are voluntary associations of credit unions on the State level, also actively promote and assist in the organization of new credit unions. In an increasing number of localities volunteers, usually officials of operating credit unions, are generating interest in the establishment of Federal credit unions. Many assist groups to apply for charters and later follow through with the instruction of the newly elected officials. In addition, new credit unions are established through the efforts of persons who learned about these self-help organizations at their previous places of employment. During the year, the Bureau granted 794 charters to groups that were found after investigation to be eligible and qualified.

A complete set of manuals is furnished to each newly chartered Federal credit union, and, when necessary, instructions and assistance in conducting the organization meeting are given by one of the Bureau's field examiners. In a number of States, Credit Union League personnel and volunteers are providing personal instructions for the officials of new credit unions. In fiscal year 1955, less than 1 percent of the official time of Bureau examiners was devoted to organization work and to the initial instructions of officers, directors, and committeemen.

In fiscal year 1955, 6,716 examinations of Federal credit unions were completed by the Bureau's staff. This was an increase of 425 over the number completed during fiscal year 1954. A total of 24,812 man-days was devoted to the making of these examinations for an average of 3.694 days per examination. The average time for the 6,291 examinations completed in fiscal year 1954 was 3.560 days. The average assets of those Federal credit unions whose examinations were completed in 1955 were \$131,314 as compared with \$119,692 for those completed in 1954. Of the examinations completed in 1955, 66 (or about 1 percent) were in cases of actual or suspected defalcations. These 66 examinations accounted for 5.4 percent of the total field examiner's time devoted to examinations during the year. The corresponding ratios for fiscal year 1954 were 1.2 percent and 4.6 percent, respectively.

At the end of fiscal year 1955, the Bureau had a budgeted staff of 238—24 departmental and 214 field. At the end of the previous year there were 23 departmental positions and 195 field positions provided in the budget. Recruiting for field examiner positions during the year proved to be more difficult than in prior years owing to the relative shortage in the available supply of trained accountants to meet the demand for such trained persons by Government agencies, private industry, and public accounting firms. Toward the end of the fiscal year the Chief of Field Operations worked out, with the assistance of the Bureau's Regional Representative in Chicago and in New York City, a procedure for direct recruiting of graduating seniors of colleges and universities. The experience gained and contacts made are expected to be even more helpful in the future than they were this year.

Fiscal year 1955 was the second year that the Bureau's operations were financed entirely by fees collected from Federal credit unions.

The Federal Credit Union Act specifies four kinds of fees and provides that the revenue from these fees shall be used to defray the costs of administering the law. A charter fee of \$5 and an investigation fee of \$20 are paid by each group when it makes application for a charter. For each calendar year after the year in which its charter is granted each Federal credit union pays a supervision fee the

amount of which is determined by the amount of its assets as of December 31 in accordance with section 5 of the act. The fourth fee is paid to the examiner at the conclusion of the examination. It is computed in accordance with a schedule fixed by the Director in conformance with the act and regulations published in the *Federal Register*. The schedule in effect during fiscal year 1955 was \$56 per examiner day or 50 cents per \$100 of the Federal credit union's assets as of the effective date of the examination, whichever was lower, with a minimum fee of \$25 per examination, except that no fee was assessed for the first examination made within 1 year after the charter was issued. Revenue from these fees totaled \$19,850 for chartering, \$335,774.21 for supervision, and \$1,154,519.95 for examinations during fiscal year 1955, as compared with \$21,575, \$277,619, and \$993,596, respectively, during fiscal year 1954.

Strengthening the Program

The growth in numbers and size of Federal credit unions is an important factor in the administration of the Bureau's program responsibilities. Solutions to new problems must be developed, trends must be studied, and probable developments anticipated in order that the necessary changes in procedures can be ready for installation at the appropriate time.

Manuals and instructional materials furnished to the officials of Federal credit unions are revised from time to time to keep them up to date and pertinent. Advice and suggestions of the operating officials, of the field examiners, and of the leaders of the organized credit union movement are solicited. This procedure has fostered good cooperation with instructions issued by the Bureau and has been of material assistance in the development of practical aids to credit union operations. This procedure of proven value is being continued.

An integral part of each examination is the instruction of the Federal credit union officials. Since these instructions can be and are geared to prevailing or anticipated conditions in the credit union concerned, the examination program is a progressive rather than a static influence on the development of sound credit union service in the Nation. The knowledge this experience gives the field examiners is a valuable resource in keeping the Bureau's policies and regulations in tune with the times.

The Bureau is continuing efforts to collect and maintain basic statistical data on Federal credit unions and to encourage research by graduate students and faculty members of colleges and universities in this field. The results of these efforts will provide the means for detecting need for change and for evaluating proposed legislation, proposed amendments to published regulations, and proposed revisions of manuals for Federal credit union officials.

During the fiscal year, after considerable study and analysis, regulations prescribing minimum standards as to amount and type of surety-bond coverage for officials and employees of Federal credit unions were promulgated and published in the *Federal Register*. These regulations implemented the amendment to the Federal Credit Union Act approved during the second session of the Eighty-third Congress to clarify provisions as to the authority of the Director to specify minimum surety-bond standards.

Responsibility for the supervision and examination of credit unions chartered by the District of Columbia was transferred to the Bureau during fiscal year 1955 by the provisions of Public Law 656, enacted by the Eighty-third Congress.

OTHER SOURCES OF SOCIAL SECURITY INFORMATION

GENERAL

Social Security Bulletin—the official monthly publication of the Social Security Administration, available through the Superintendent of Documents, U. S. Government Printing Office, Washington 25, D. C. An annual statistical supplement, with calendar-year data, is included in each September issue.

Selected Social Security Research Reports—a list of reports of the Division of Research and Statistics, Office of the Commissioner, including selected Research and Statistics Notes, available through the Director of the Division.

Old-Age, Survivors, and Invalidity Programs Throughout the World, 1954, Division of Research and Statistics, Report No. 19.

Social Workers Abroad Assess Their Training in the United States, April 1955, International Service Office, Office of the Commissioner.

OLD-AGE AND SURVIVORS INSURANCE

The Minimum Benefit Under Old-Age and Survivors Insurance—A Report on a Study Called for by Public Law 761, 83rd Congress, 1955, available through the Bureau of Old-Age and Survivors Insurance.

Federal Old-Age and Survivors Insurance Trust Fund: Fifteenth Annual Report. U. S. Board of Trustees of the Federal Old-Age and Survivors Insurance Trust Fund. (S. Doc. 39, 84th Cong., 1st sess.) Washington: U. S. Government Printing Office, 1955.

Actuarial Studies, Division of the Actuary, Office of the Commissioner: *Long-Range Cost Estimates for Old-Age and Survivors Insurance, 1954* (No. 39); *The Financial Principle of Self-Support in the Old-Age and Survivors Insurance System* (No. 40); *Analysis of Benefits, OASI Program, 1954 Amendments* (No. 41); *Present Values of OASI Benefits in Current Payment Status, 1940-54* (No. 42); *Esti-*

mated Amount of Life Insurance in Force as Survivor Benefits Under OASI—1955 (No. 43).

PUBLIC ASSISTANCE

Administrative Costs of Public Assistance, Variations Among States, 1954. Public Assistance Report No. 25.

State Methods for Establishing Workload and Staffing Standards. How They Do It Series, June 1955.

Kit on the Development of Manuals and Written Instructions for Use in State Public Assistance Agencies, Part I, July 1955.

Recipients of Old-Age Assistance in Early 1953, Part I, State Data. Public Assistance Report No. 26, June 1955.

Aid to Dependent Children: Continuing Effect of the Requirement That Law-Enforcement Officials Be Notified of the Furnishing of Aid in Cases Involving Desertion or Abandonment, July 1952–December 1953. June 1955.

Staff Participation in the Evaluation of a Policy on Case Recording. Current Practices in Staff Training, No. IX, June 1955.

CHILD HEALTH AND CHILD WELFARE

For current reports, see the Children's Bureau section of this Annual Report.

Table 1.—Social Security Administration: Funds available and obligations incurred, fiscal years 1955 and 1954¹

[In thousands; data as of June 30, 1955]

Item	Funds available ²		Obligations incurred	
	1955	1954	1955	1954
Total.....	\$1,552,994	\$1,496,414	\$1,538,748	\$1,483,196
Grants to States.....	1,467,000	1,428,000	1,453,199	1,415,420
Public assistance.....	1,437,000	1,398,000	1,423,943	1,386,931
Old-age assistance.....			920,791	931,711
Aid to the blind.....			36,467	35,561
Aid to dependent children.....			385,233	347,236
Aid to the permanently and totally disabled.....			81,452	72,423
Maternal and child health and welfare services.....	30,000	30,000	29,256	28,489
Maternal and child health services.....	11,928	11,928	11,919	11,787
Services for crippled children.....	10,843	10,843	10,614	10,601
Child welfare services.....	7,229	7,229	6,723	6,101
Administrative expenses ³	85,994	68,414	85,549	67,776
Office of the Commissioner ⁴	309	298	304	286
Bureau of Old-Age and Survivors Insurance ⁵	81,020	63,746	80,688	63,188
Bureau of Public Assistance.....	1,501	1,551	1,487	1,529
Children's Bureau ⁶	1,629	1,525	1,617	1,521
Bureau of Federal Credit Unions.....	1,535	1,294	1,453	1,252

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 Funds made available and obligations incurred for salaries, printing and binding, communications, traveling expenses, and reimbursement items for services rendered to other Government agencies.

⁴ Appropriations by Congress from general revenues accounted for approximately 57 percent of the administrative expenses of the Office of the Commissioner in 1954 and 1955; balance from old-age and survivors insurance trust fund.

⁵ For administration of the old-age and survivors insurance program, which involved benefit payments of \$3,275,000,000 in 1954 and \$4,333,000,000 in 1955.

⁶ 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 1953–55

[In millions]

Item	1955	1954	1953
Contributions collected under—			
Federal Insurance Contributions Act ¹	\$5,087	\$4,589	\$4,097
Federal Unemployment Tax Act ²	279	285	277
State unemployment insurance laws ³	1,142	1,246	1,368
Old-age and survivors insurance trust fund:			
Receipts, total.....	5,534	5,040	4,483
Transfers and appropriations ¹	5,087	4,589	4,097
Interest and profits on investments ⁵	448	450	387
Expenditures, total.....	4,436	3,365	2,717
Monthly benefits and lump-sum payments ⁶	4,333	3,276	2,627
Administration.....	103	89	89
Assets, end of year.....	21,141	20,043	18,306
State accounts in the unemployment trust fund:			
Receipts, total.....	1,333	1,454	1,560
Deposits ⁴	1,146	1,246	1,371
Interest.....	187	208	189
Withdrawal for benefit payments.....	1,760	1,605	908
Assets, end of year.....	7,983	8,409	8,559

¹ Contributions on earnings up to and including \$3,600 a year in 1953 and 1954 and \$4,200 a year beginning Jan. 1, 1955. Contribution rate paid by employers and employees: 1½ percent each in 1953 and 2 percent each beginning Jan. 1, 1954. Contribution rate paid by self-employed: 2¼ percent in 1953 and 3 percent beginning Jan. 1, 1954. Includes deposits by States under voluntary agreements for coverage of State and local employees. Includes deductions to adjust for reimbursement to the General Treasury of the estimated amount of taxes subject to refund on wages in excess of wage base.

² Tax paid only by employers of 8 or more. Employers offset against this tax—up to 90 percent of the amount assessed—contributions which they have paid under State unemployment insurance laws or full amount they would have paid if they had not been allowed reduced contribution rates under State experience-rating provisions. Rate is 3 percent of first \$3,000 a year of wages paid to each employee by subject employer; because of credit offset, effective rate is 0.3 percent of such wages.

³ Contributions plus penalties and interest collected from employers and contributions from employees, reported by State agencies.

⁴ Contributions and deposits by States usually differ slightly, primarily because of time lag in making deposits.

⁵ For 1954 and 1955, includes interest transferred from the railroad retirement account under the financial interchange provision of the Railroad Retirement Act, as amended in 1951.

⁶ Represents checks issued.

Source: Compiled from *Monthly Statement of the U. S. Treasury*, other Treasury reports, and State agency reports.

Table 3.—Old-age and survivors insurance: Estimated number of families and beneficiaries in receipt of benefits and average monthly benefit in current-payment status, by family group, end of June 1955 and 1954

[In thousands, except for average benefit; data corrected to Nov. 25, 1955]

Family classification of beneficiaries	June 30, 1955			June 30, 1954		
	Number of families	Number of beneficiaries	Average monthly amount per family	Number of families	Number of beneficiaries	Average monthly amount per family
Total.....	5,542.3	7,563.5	-----	4,690.2	6,468.8	-----
Retired worker families.....	4,214.8	5,462.3	-----	3,519.4	4,577.6	-----
Worker only.....	3,067.4	3,067.4	\$58.20	2,545.4	2,545.4	\$49.40
Male.....	1,962.0	1,962.0	63.70	1,669.9	1,669.9	53.80
Female.....	1,105.4	1,105.4	48.60	875.5	875.5	41.10
Worker and wife aged 65 or over.....	1,066.6	2,133.2	102.20	904.9	1,809.8	86.30
Worker and wife under age 65.....	.4	.8	105.00	.6	1.2	95.60
Worker and aged dependent husband.....	9.2	18.4	86.50	7.3	14.6	75.20
Worker and 1 child.....	10.0	20.0	98.70	9.2	18.4	76.00
Worker and 2 or more children.....	6.1	22.2	102.20	5.8	20.4	79.40
Worker, wife aged 65 or over, and 1 or more children.....	1.0	3.0	123.30	.8	2.6	98.90
Worker, wife under age 65, and 1 child.....	34.5	103.5	119.20	28.5	85.5	100.70
Worker, wife under age 65, and 2 or more children.....	19.6	93.8	112.90	16.9	79.7	93.40
Survivor families.....	1,327.5	2,101.2	-----	1,170.8	1,891.2	-----
Aged widow.....	688.2	688.2	46.60	585.1	585.1	41.00
Aged dependent widower.....	1.2	1.2	40.70	.9	.9	34.40
Widowed mother only ¹	1.5	1.5	48.10	2.0	2.0	45.20
Widowed mother and 1 child.....	120.9	241.8	104.90	118.5	237.0	91.50
Widowed mother and 2 children.....	84.5	253.5	132.30	78.5	235.5	114.50
Widowed mother and 3 or more children.....	74.5	349.5	129.20	68.8	322.6	111.80
Divorced wife and 1 or more children.....	.2	.4	124.00	.2	.6	111.50
1 child only.....	202.3	202.3	47.90	175.5	175.5	42.20
2 children.....	80.8	161.6	81.60	73.5	147.0	72.20
3 children.....	29.5	88.5	100.20	25.9	77.7	88.30
4 or more children.....	19.9	87.2	104.80	19.1	83.0	92.60
1 aged dependent parent.....	22.3	22.3	48.00	21.2	21.2	42.60
2 aged dependent parents.....	1.7	3.4	92.60	1.6	3.2	81.40

¹ Benefits of children were being withheld.

Table 4.—Old-age and survivors insurance: Number and amount of monthly benefits in current-payment status at end of fiscal year 1955, and amount of benefits paid in fiscal year 1955, by State

[In thousands, distribution by State estimated; corrected to Nov. 15, 1955]

Beneficiary's State of residence	Monthly benefits in current-payment status, end of fiscal year 1955		Benefit payments, fiscal year 1955		
	Number	Amount	Total	Monthly benefits	Lump-sum payments
Total.....	7,563.5	\$384,025	\$4,333,148	\$4,232,609	\$100,539
Alabama.....	109.7	4,464	50,705	49,487	1,218
Alaska.....	3.8	172	2,085	2,022	63
Arizona.....	33.9	1,630	18,346	17,929	417
Arkansas.....	66.4	2,689	30,235	29,551	684
California.....	616.4	32,181	362,502	354,303	8,199
Colorado.....	62.2	3,035	34,183	33,424	759
Connecticut.....	129.4	7,424	83,422	81,488	1,934
Delaware.....	17.4	908	10,290	10,007	283
District of Columbia.....	28.5	1,428	16,229	15,749	480
Florida.....	196.8	9,991	110,775	108,778	1,997
Georgia.....	112.2	4,549	51,906	50,350	1,556
Hawaii.....	16.9	772	8,886	8,760	126
Idaho.....	25.1	1,162	12,994	12,765	229
Illinois.....	456.5	24,665	278,588	271,483	7,105
Indiana.....	218.5	11,043	124,193	121,454	2,739
Iowa.....	114.0	5,460	61,022	59,745	1,277
Kansas.....	83.4	3,938	44,199	43,177	1,022
Kentucky.....	119.9	5,231	59,223	57,812	1,411
Louisiana.....	86.6	3,687	42,118	40,931	1,187
Maine.....	63.8	3,072	34,727	34,019	708
Maryland.....	104.8	5,290	60,077	58,365	1,712
Massachusetts.....	321.9	17,670	199,730	195,607	4,123
Michigan.....	328.2	18,035	203,390	198,608	4,782
Minnesota.....	134.9	6,792	76,173	74,538	1,635
Mississippi.....	54.9	2,080	23,450	22,880	570
Missouri.....	192.8	9,635	107,437	104,819	2,618
Montana.....	26.8	1,304	14,636	14,327	309
Nebraska.....	52.2	2,464	27,456	26,906	550
Nevada.....	7.7	392	4,442	4,298	144
New Hampshire.....	39.2	1,980	22,359	21,921	438
New Jersey.....	290.9	16,319	184,118	179,742	4,376
New Mexico.....	19.8	804	9,089	8,854	235
New York.....	46,176	521,563	508,868	508,868	12,665
North Carolina.....	125.6	5,142	58,440	56,944	1,496
North Dakota.....	14.7	639	7,165	6,992	173
Ohio.....	449.3	24,100	272,105	265,744	6,361
Oklahoma.....	82.4	3,686	41,586	40,604	982
Oregon.....	96.6	4,987	55,938	54,882	1,056
Pennsylvania.....	617.3	33,313	376,669	368,058	8,611
Puerto Rico.....	24.5	724	7,478	7,346	132
Rhode Island.....	54.6	2,960	33,459	32,718	741
South Carolina.....	64.7	2,541	29,107	28,249	858
South Dakota.....	20.3	919	10,244	10,009	235
Tennessee.....	111.5	4,659	52,770	51,517	1,253
Texas.....	263.5	11,202	126,731	123,310	3,421
Utah.....	28.3	1,369	15,416	15,080	336
Vermont.....	22.1	1,074	12,024	11,827	197
Virgin Islands.....	3	11	106	106	(1)
Virginia.....	125.5	5,588	63,411	61,685	1,726
Washington.....	142.9	7,503	84,540	82,925	1,615
West Virginia.....	104.6	4,909	55,747	54,719	1,028
Wisconsin.....	183.9	9,589	107,311	104,965	2,346
Wyoming.....	10.4	511	5,728	5,600	128
Foreign.....	44.5	2,257	26,625	26,362	263

¹ Less than \$500.

Table 5.—Old-age and survivors insurance: Selected data on benefits, employers, workers, and taxable earnings for specified periods, 1953-55

[In thousands except for average monthly benefit and average taxable earnings; corrected to Nov. 15, 1955]

Item	1955	1954	1953
	Fiscal year		
Benefits in current-payment status (end of period):			
Number.....	7,563.5	6,468.8	5,573.6
Old-age.....	4,214.8	3,519.4	2,977.5
Wife's or husband's.....	1,131.3	959.1	826.6
Child's.....	1,220.9	1,111.9	1,003.3
Widow's or widower's.....	689.8	586.3	499.0
Mother's.....	281.2	267.7	244.8
Parent's.....	25.6	24.4	22.5
Total monthly amount.....	\$384,025	\$278,702	\$232,999
Old-age.....	257,230	182,334	150,124
Wife's or husband's.....	37,011	26,302	22,050
Child's.....	43,730	34,770	30,541
Widow's or widower's.....	32,150	24,016	20,332
Mother's.....	12,677	10,249	9,015
Parent's.....	1,226	1,030	936
Average monthly amount:			
Old-age.....	\$61.03	\$51.81	\$50.42
Wife's or husband's.....	32.72	27.42	26.68
Child's.....	35.82	31.27	30.44
Widow's or widower's.....	46.61	40.96	40.75
Mother's.....	45.08	38.28	36.82
Parent's.....	47.86	42.26	41.68
Benefit payments during period:			
Monthly benefits.....	\$4,232,609	\$3,185,282	\$2,551,224
Old-age.....	2,802,967	2,068,404	1,624,605
Supplementary.....	428,847	318,614	252,994
Survivor.....	1,000,795	798,264	673,625
Lump-sum payments.....	100,539	90,175	76,268
Estimated number of living workers with wage credits (mid-point of period—Jan. 1): ¹			
Total.....	95,200	93,600	91,000
Fully insured.....	69,800	70,800	67,700
Currently but not fully insured.....	600	(²)	(²)
Uninsured.....	24,800	22,800	23,300
Estimated number of employers reporting taxable wages, 1st quarter of fiscal year.....	3,700	3,650	3,663
	Calendar year		
Estimated number of workers with taxable earnings.....	(⁴)	60,000	61,000
Estimated amount of taxable earnings.....	(⁴)	\$134,000,000	\$136,000,000
Average taxable earnings ³	(⁴)	\$2,230	\$2,230

¹ Estimates of insured workers have not been adjusted to reflect changes in insurance status arising from: (1) provisions that coordinate the old-age and survivors 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. The effect of such duplication is substantially less significant for insured workers than for uninsured workers.

² All persons currently insured on these dates are also fully insured.

³ Rounded to nearest \$10.

⁴ Not available.

Table 6.—Special types of public assistance under plans approved by the Social Security Administration: Number of recipients and average payment, June 1955, and total payments to recipients, by program and State, fiscal year 1955

[Includes vendor payments for medical care and cases receiving only such payments]

[Corrected to Nov. 15, 1955]

State	Old-age assistance				Aid to dependent children				Aid to the blind			Aid to the permanently and totally disabled		
	Number of recipients, June		Payments to recipients		Number of recipients, June		Payments to recipients		Number of recipients, June		Payments to recipients		Num. of recipients, June	Average payment, June
	Total	Families	Total, fiscal year (in thousands)	Average payment per family, June	Total	Children	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		
Fiscal year:														
1963.....	2,608,898		\$1,581,052		1,983,431	1,493,622	\$83.98	\$23.89	\$562,026	99,032	\$55.53	\$64,325	179,395	\$53.72
1964.....	2,582,403		1,589,618		2,079,389	1,566,664	83.08	23.81	561,100	100,630	55.80	86,763	211,741	53.51
1965.....	2,548,593		1,589,802		2,239,430	1,691,699	86.78	24.04	620,545	103,906	57.41	68,253	236,840	54.35
Alabama.....	70,466		23,672		70,428	54,159	43.78	11.34	8,797	1,617	35.32	611	10,148	35.85
Alaska.....	1,699		63.78		4,260	3,134	89.83	23.96	1,080	67	63.57	37		
Arizona.....	13,773		55.87		17,593	13,294	94.64	24.68	4,989	749	63.89	530		
Arkansas.....	54,665		33.77		35,946	26,204	53.49	14.70	5,118	2,002	40.51	939	4,913	31.08
California.....	269,190		221,923		185,483	143,966	126.07	37.50	80,651	12,655	84.50	12,645		
Colorado.....	52,458		51,070		22,209	17,014	107.68	28.68	7,283	316	66.87	254	4,957	57.09
Connecticut.....	16,826		16,784		16,915	12,547	136.69	42.10	7,795	329	90.20	341	1,923	107.13
Delaware.....	1,627		39.92		4,301	3,289	86.44	22.39	1,044	213	62.54	154	258	52.15
District of Columbia.....	3,076		53.69		8,758	6,785	107.24	26.00	2,969	296	59.34	179	2,205	60.52
Florida.....	69,248		38,156		74,620	56,779	54.67	16.50	13,461	2,845	49.04	1,686		
Georgia.....	98,384		43,890		53,098	40,555	75.15	20.71	12,562	3,382	42.97	1,695	9,106	42.07
Hawaii.....	1,802		48.24		12,810	10,149	93.09	24.32	3,536	117	55.68	71	1,330	63.64
Idaho.....	8,764		54.83		6,793	4,989	127.50	35.62	2,770	189	61.30	137	854	61.09
Illinois.....	95,315		61.93		80,494	60,894	132.82	34.55	31,960	3,557	68.59	2,750	6,047	81.66
Indiana.....	36,750		21,489		20,719	22,771	90.51	25.84	9,100	1,792	58.39	1,217		
Iowa.....	41,412		57.59		25,911	17,891	115.90	31.88	8,659	1,431	73.47	1,231		
Kansas.....	34,151		65.85		16,038	11,068	110.68	30.72	5,769	631	73.28	532	3,437	68.22
Kentucky.....	55,572		23,408		67,924	50,691	17.65	13.90	13,930	2,949	37.11	1,271		
Kentucky.....	120,134		50.97		70,931	53,888	65.37	16.89	13,726	2,048	49.79	1,195	12,805	42.57
Maine.....	12,566		46.38		15,341	11,086	81.79	23.57	4,208	543	50.44		103	48.70
Maryland.....	10,542		45.20		25,838	20,016	96.09	23.71	7,045	478	51.85	289	4,453	53.47
Massachusetts.....	89,127		82.976		13,061	32,194	127.13	38.08	19,295	1,792	93.81	1,944	10,349	100.35
Michigan.....	74,906		55.70		66,837	50,729	111.77	32.75	25,786	1,801	63.49	1,341	2,297	71.85

Minnesota.....	51,707	65,38	40,886	7,959	27,015	20,741	120,39	35,47	10,803	1,248	128,12	1,162	698	54,52	371
Mississippi.....	70,724	27,80	22,595	13,500	50,879	29,243	120,99	67,10	4,613	3,690	34,55	1,379	2,979	24,40	840
Missouri.....	132,983	49,59	74,211	22,109	77,434	57,623	167,83	19,33	17,214	4,120	55,00	2,607	14,154	51,91	8,855
Montana.....	9,018	37,83	6,432	2,103	7,434	5,552	105,97	28,15	2,663	742	64,89	348	1,450	63,65	1,087
Nebraska.....	17,813	50,30	10,823	2,551	9,208	6,875	61,40	26,15	2,819	742	58,07	498			
Nevada.....	2,629	57,46	1,816	(*)	(*)	9	41,40	33,07	(*)	110	75,10	89			
New Hampshire.....	6,288	53,03	4,527	1,085	4,002	3,010	123,37	33,07	1,591	272	63,67	208	234	73,24	184
New Jersey.....	20,330	68,53	16,130	6,009	20,134	15,268	118,37	35,33	7,766	869	69,31	709	3,301	80,35	2,749
New Mexico.....	10,212	31,90	6,102	0,112	22,350	17,018	108,93	18,95	5,844	388	35,58	225	1,685	31,21	1,827
New York.....	101,634	74,07	96,032	54,257	193,078	142,665	136,55	38,01	85,288	4,807	88,03	4,519	41,116	83,52	39,628
North Carolina.....	51,780	31,74	19,245	19,756	74,944	57,211	124,47	10,37	13,827	4,807	46,71	2,302	11,321	37,70	4,559
North Dakota.....	8,252	62,83	6,154	1,497	5,900	4,213	113,16	31,35	2,033	3,738	65,92	77	8,843	68,28	4,722
Ohio.....	101,396	58,23	71,166	15,725	59,324	43,012	94,05	24,33	16,370	3,738	58,91	2,499	8,343	49,82	4,585
Oklahoma.....	95,216	61,48	66,884	15,720	51,957	40,044	76,69	23,80	13,850	2,034	73,40	1,713	5,870	58,70	3,492
Oregon.....	10,528	64,96	13,488	3,895	13,796	10,420	119,71	23,80	5,430	2,446	73,40	315	3,301	74,90	2,767
Pennsylvania.....	56,773	45,73	32,295	29,886	113,475	85,794	104,24	27,43	36,484	16,406	59,90	10,026	13,043	53,45	8,221
Puerto Rico.....	44,478	7,86	4,193	42,143	144,181	110,717	10,38	3,03	5,094	1,552	7,80	133	19,304	8,61	1,865
Rhode Island.....	8,116	59,44	5,790	3,506	11,945	8,763	110,45	32,42	4,474	177	72,82	156	1,483	75,83	1,211
South Carolina.....	43,247	32,50	16,398	8,287	32,130	23,034	47,57	22,26	4,468	1,747	33,02	772	7,817	31,73	1,794
South Dakota.....	10,768	44,79	5,862	2,851	9,390	7,184	82,57	23,97	2,768	3,207	43,90	104	7,689	46,33	348
Tennessee.....	63,810	34,78	28,223	21,175	75,933	56,044	64,93	16,71	16,290	3,207	41,40	1,624	1,471	39,89	655
Texas.....	225,043	39,10	103,707	23,631	92,684	69,359	56,39	14,38	13,741	6,501	44,22	3,368			
Utah.....	9,443	59,56	6,806	3,089	10,841	8,043	111,40	31,74	4,240	6,293	67,19	179	1,704	64,75	1,345
Vermont.....	6,858	44,64	3,649	1,132	3,923	2,955	78,81	22,74	989	152	48,96	163	447	49,70	241
Virgin Islands.....	689	18,56	1,127	201	756	620	35,26	9,38	39	34	(*)	7	104	19,27	18
Virginia.....	17,211	30,14	6,166	8,844	34,279	26,481	65,26	10,84	6,848	1,808	36,17	556	4,679	38,86	2,092
Washington.....	53,864	61,61	44,764	9,070	30,863	22,627	119,48	33,11	11,353	771	73,35	728	5,389	72,72	4,743
West Virginia.....	24,242	27,69	8,742	18,905	70,462	54,743	73,15	19,31	16,784	1,184	22,13	484	8,510	31,25	3,175
Wisconsin.....	43,095	63,47	32,384	8,173	28,416	20,966	136,74	39,33	12,492	1,139	68,03	917	1,133	90,06	1,209
Wyoming.....	3,991	58,70	2,847	566	2,033	1,541	109,13	30,38	704	67	63,48	52	1,460	60,42	323

* Includes as recipients the children and 1 parent or other adult relative in families in which the requirements of at least 1 adult was considered in determining the amount of assistance.
 † No approved plan in operation.
 ‡ Average payment not computed on base of less than 50 recipients.

Table 7.—Special types of public assistance under plans approved by the Social Security Administration: Federal grants to States and total expenditures and percent from Federal funds, by program and State, fiscal year 1955

[Includes vendor payments for medical care; amounts in thousands; data corrected to Nov. 15, 1955]

State	Federal grants to States ¹				Expenditures for assistance and administration								
	Total	Old-age assistance	Aid to dependent children	Aid to the blind and totally disabled	Old-age assistance		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	
Fiscal year:													
1953	\$1,338,989	\$903,241	\$243,321	\$33,017	\$59,410	\$1,071,805	55.0	\$818,294	55.8	\$69,508	48.8	\$116,971	51.0
1954	1,386,931	931,711	347,226	35,561	72,423	1,084,409	56.0	619,257	57.2	72,129	49.6	141,418	51.2
1955	1,423,907	920,791	385,233	36,467	81,416	1,086,287	55.4	683,932	56.6	74,938	49.1	164,332	50.3
Alabama	28,514	17,889	7,353	460	2,812	25,648	72.3	9,634	77.3	649	71.3	3,996	70.5
Alaska	1,006	798	24	24		1,357	51.2	1,163	67.1	43	57.4		
Arizona	9,371	5,544	3,522	304		9,546	58.2	5,220	67.6	569	54.5		
Arkansas	21,105	15,393	3,830	644	1,238	22,151	71.2	5,399	78.4	973	67.7	1,086	72.2
California	169,559	113,041	42,182	5,337		234,501	48.2	92,212	45.6	13,585	38.5		
Colorado	26,499	19,995	4,475	136	1,894	32,541	38.6	7,981	56.9	282	49.2	3,577	55.5
Connecticut	11,532	7,118	3,540	132	743	17,945	40.0	8,392	41.8	359	48.2	2,200	33.9
Delaware	1,518	900	749	95	80	856	67.5	1,111	66.9	182	52.8	131	57.7
District of Columbia	4,198	1,191	1,964	103	998	2,087	57.4	3,244	59.8	159	55.7	1,671	54.5
Florida	37,773	25,461	11,191	1,121		39,547	64.0	14,537	76.8	1,765	64.7	2	
Georgia	45,750	31,944	9,685	1,188	2,932	46,252	68.9	13,334	70.5	1,790	66.6	4,552	66.3
Hawaii	3,549	692	2,860	44	483	1,087	60.6	3,980	59.5	81	55.3	1,005	49.0
Idaho	3,159	3,335	1,399	77	347	6,038	56.2	2,976	47.3	149	52.6	604	52.6
Illinois	60,141	39,096	16,881	1,560	2,695	73,939	53.4	34,572	49.2	3,069	50.9	6,105	43.4
Indiana	19,549	12,540	6,314	696		23,241	56.8	9,982	62.3	1,376	51.3		
Iowa	21,384	16,016	4,772	606		30,620	54.6	9,239	50.8	1,324	45.8		
Kansas	18,753	13,956	3,214	267	1,317	28,320	49.4	6,226	51.3	570	46.5	2,869	46.7
Kentucky	28,954	17,280	10,793	980		24,490	70.4	14,804	74.1	1,328	69.4		
Louisiana	64,262	48,169	11,047	750	4,297	76,913	63.0	15,686	72.9	1,306	38.2	7,113	62.3
Maine	8,091	4,793	3,064	225	8	7,453	65.2	4,518	67.8	348	64.2	14	60.9
Maryland	10,583	3,735	4,999	177	1,672	6,114	61.2	7,874	62.3	308	58.7	2,890	57.3
Massachusetts	50,348	36,030	9,363	766	4,189	88,364	41.9	21,226	44.2	2,039	37.3	12,490	35.5
Michigan	44,944	29,089	14,248	731	876	53,355	55.3	27,319	51.2	1,393	52.2	1,895	46.4
Minnesota	25,846	19,587	5,533	518	209	42,918	46.6	11,784	46.8	1,249	41.8	1,431	58.7
Mississippi	24,197	18,163	4,239	1,028	768	23,907	75.7	5,233	76.1	1,457	71.1	974	75.8

Missouri.....	73,185	52,609	13,193	1,376	5,947	81,951	64.6	18,366	71.7	2,814	49.1	9,367	63.7
Montana.....	6,077	3,626	1,637	190	618	6,846	54.6	2,804	54.5	388	51.1	1,201	51.3
Nebraska.....	8,993	4,757	1,870	293	1,777	11,777	57.3	5,074	61.1	540	55.0	-----	-----
Nevada.....	1,160	1,111	233	46	1,971	1,971	67.3	1,115	217.2	103	44.2	-----	-----
New Hampshire.....	3,455	2,467	790	109	90	4,804	52.2	1,732	47.3	224	49.8	210	45.7
New Jersey.....	13,870	8,207	3,950	372	1,331	18,098	47.1	8,552	47.6	805	48.1	3,146	42.7
New Mexico.....	10,217	4,570	2,825	172	651	6,592	64.1	6,497	71.1	244	65.4	3,083	45.7
New York.....	106,694	43,004	18,530	2,054	18,077	108,191	41.3	98,552	45.8	5,367	39.8	45,804	40.3
North Carolina.....	31,123	14,789	11,234	1,740	3,393	20,337	72.7	14,076	75.8	2,367	69.2	4,046	68.6
North Dakota.....	4,669	3,036	1,312	147	3,354	6,004	48.9	2,188	50.9	2,088	52.3	4,733	44.2
Ohio.....	55,880	28,839	11,344	1,562	3,235	75,060	54.3	18,122	62.0	2,797	56.3	5,185	63.1
Oklahoma.....	50,123	37,854	9,411	858	2,021	69,019	54.8	14,697	68.2	1,770	48.3	2,738	59.7
Oregon.....	12,300	7,854	3,029	130	1,327	16,583	48.2	6,049	48.2	1,335	44.7	2,092	43.8
Pennsylvania.....	51,744	20,679	22,400	3,543	5,022	35,967	38.7	41,043	58.7	10,640	33.9	5,652	50.3
Puerto Rico.....	4,162	1,539	1,841	38	724	4,636	33.6	5,748	32.6	174	33.6	2,236	33.6
Rhode Island.....	6,125	3,091	2,382	76	576	6,186	51.2	4,748	50.2	167	45.7	1,289	45.4
South Carolina.....	19,129	12,549	3,851	590	2,168	17,417	72.1	4,912	77.3	823	68.6	3,066	71.7
South Dakota.....	6,317	4,023	1,962	78	254	6,318	65.6	2,991	64.4	113	63.7	3,397	64.2
Tennessee.....	35,571	20,826	13,091	1,134	520	29,598	70.4	17,318	74.2	1,078	67.4	788	63.7
Texas.....	88,988	73,467	13,123	2,376	-----	107,257	69.0	16,819	77.8	3,392	50.9	-----	-----
Utah.....	6,927	3,749	2,347	36	737	7,065	54.2	4,530	50.6	187	50.9	1,417	51.6
Vermont.....	3,468	2,481	754	61	172	3,829	66.1	1,077	68.4	97	50.9	261	64.2
Virgin Islands.....	145	85	45	4	12	161	49.9	82	49.6	8	50.0	24	50.0
Virginia.....	12,308	4,800	5,553	421	1,533	6,916	70.6	7,560	73.0	635	67.1	2,388	64.6
Washington.....	32,149	23,369	6,166	333	2,282	46,895	50.3	12,288	52.2	771	42.8	5,041	45.8
West Virginia.....	21,275	6,715	11,991	332	2,217	9,126	74.4	17,276	71.5	504	71.1	3,425	71.0
Wisconsin.....	22,414	15,718	3,755	471	189	34,729	47.6	13,376	42.8	987	47.7	1,289	36.8
Wyoming.....	2,270	1,643	410	28	470	3,029	54.6	13,776	53.2	56	52.3	1,345	53.0

¹ Based on checks issued (excluding any amounts paid during the fiscal year for a prior or subsequent year); may differ slightly from fiscal-year expenditures from Federal funds reported by States.

² Program approved for Federal participation in administrative costs beginning April 1965; in assistance payments beginning July 1965.

Table 8.—Maternal and child health and welfare services: Grants to States for maternal and child health services, services for crippled children, and child welfare services under the Social Security Act, by program and State, fiscal year 1955¹

[In thousands]

State	Maternal and child health services			Services for crippled children			Child welfare services
	Total	Fund A	Fund B	Total	Fund A	Fund B	
United States.....	\$11,919.3	\$5,956.6	\$5,962.7	\$10,613.1	\$5,192.0	\$5,421.1	\$6,724.4
Alabama.....	441.3	123.0	318.3	344.3	115.0	229.3	222.2
Alaska.....	91.2	47.7	43.5	142.4	45.8	96.6	28.8
Arizona.....	87.9	64.8	23.1				67.5
Arkansas.....	222.3	86.5	135.8	261.6	86.7	174.9	160.0
California.....	563.5	291.3	272.2	376.8	243.2	133.6	171.6
Colorado.....	188.8	77.5	111.3	99.1	71.5	27.6	80.3
Connecticut.....	130.3	84.5	45.8	191.2	79.5	111.7	67.8
Delaware.....	86.6	51.2	35.4	70.4	49.7	20.7	40.5
District of Columbia.....	152.4	62.9	89.5	141.4	56.1	85.3	28.9
Florida.....	263.0	110.5	152.5	191.3	100.2	91.1	134.6
Georgia.....	357.2	134.1	223.1	392.5	123.2	269.3	211.7
Hawaii.....	144.9	57.1	87.8	128.7	54.6	74.1	44.2
Idaho.....	91.3	58.9	32.4	78.7	57.1	21.6	29.6
Illinois.....	327.7	234.6	93.1	349.8	202.4	147.4	174.0
Indiana.....	228.1	139.6	88.5	145.0	123.4	21.6	92.5
Iowa.....	192.4	106.4	86.0	206.3	96.1	110.2	100.9
Kansas.....	124.3	88.3	36.0	121.9	81.7	40.2	110.6
Kentucky.....	309.1	115.8	193.3	355.0	108.4	246.6	224.9
Louisiana.....	308.3	119.8	188.5	266.1	107.0	159.1	168.7
Maine.....	92.6	63.6	29.0	89.0	61.5	27.5	69.3
Maryland.....	325.0	100.4	224.6	264.8	91.0	173.8	100.7
Massachusetts.....	371.7	138.9	232.8	168.6	126.9	41.7	85.1
Michigan.....	336.3	208.3	128.0	298.0	177.0	121.0	222.0
Minnesota.....	227.2	119.5	107.7	201.1	105.0	96.1	153.2
Mississippi.....	318.9	105.8	213.1	314.7	96.7	218.0	204.6
Missouri.....	241.4	129.1	112.3	240.4	118.9	121.5	168.5
Montana.....	84.3	58.4	25.9	104.5	55.8	48.7	52.5
Nebraska.....	93.6	75.2	18.4	97.7	70.1	27.6	48.7
Nevada.....	73.1	47.2	25.9	59.7	41.0	18.7	35.7
New Hampshire.....	68.3	51.0	17.3	67.8	52.8	15.0	48.3
New Jersey.....	169.2	143.5	25.7	162.4	129.2	33.2	82.0
New Mexico.....	119.8	65.9	53.9	90.8	61.2	29.6	71.2
New York.....	445.2	344.4	100.8	333.7	299.5	34.2	216.8
North Carolina.....	518.3	148.8	369.5	472.0	140.4	331.6	325.3
North Dakota.....	85.7	59.8	25.9	88.8	57.1	31.7	66.1
Ohio.....	379.3	233.6	145.7	326.4	198.3	128.1	233.6
Oklahoma.....	161.5	91.5	70.0	226.6	90.6	136.0	136.0
Oregon.....	106.7	78.9	27.8	95.5	73.9	21.6	72.2
Pennsylvania.....	501.9	266.9	235.0	454.3	241.1	213.2	286.6
Puerto Rico.....	341.7	123.3	218.4	303.9	109.7	194.2	200.8
Rhode Island.....	88.0	59.4	28.6	91.0	57.3	33.7	39.3
South Carolina.....	258.6	101.1	157.5	279.5	96.1	183.4	188.7
South Dakota.....	86.6	60.7	25.9	79.2	57.6	21.6	71.3
Tennessee.....	341.7	123.3	218.4	272.4	113.7	158.7	218.1
Texas.....	528.2	250.4	277.8	404.6	67.3	337.3	331.0
Utah.....	126.5	65.1	61.4	83.4	61.0	22.4	59.1
Vermont.....	71.1	52.0	19.1	64.0	51.0	13.0	51.1
Virgin Islands.....	70.2	44.3	25.9	65.7	44.1	21.6	30.2
Virginia.....	311.6	126.4	185.2	293.1	114.6	178.5	214.0
Washington.....	170.8	98.6	72.2	127.2	90.2	37.0	112.5
West Virginia.....	205.2	91.6	113.6	219.0	88.7	130.3	170.1
Wisconsin.....	218.4	127.2	91.2	244.0	113.6	130.4	171.2
Wyoming.....	70.1	48.0	22.1	66.8	37.5	29.3	29.3

¹ Based on checks issued less refunds.

Table 9.—Federal credit unions: Number of members, amount of assets, amount of shares, and amount of loans outstanding Dec. 31, 1935–54

Year	Number of reporting credit unions ¹	Number of members	Amount of assets	Amount of shares	Amount of loans
1935.....	762	118,665	\$2,368,521	\$2,224,608	\$1,830,489
1936.....	1,725	307,651	9,142,943	8,496,526	7,330,248
1937.....	2,296	482,441	19,249,738	17,636,414	15,683,676
1938.....	2,753	631,436	29,621,501	26,869,367	23,824,703
1939.....	3,172	849,806	47,796,278	43,314,433	37,663,782
1940.....	3,739	1,126,222	72,500,539	65,780,063	55,801,026
1941.....	4,144	1,396,696	105,656,839	96,816,948	69,249,487
1942.....	4,070	1,347,519	119,232,893	109,498,801	42,886,750
1943.....	3,859	1,302,363	126,948,085	116,988,974	35,228,153
1944.....	3,795	1,303,801	144,266,156	133,586,147	34,403,467
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

¹ In the period 1945 through 1954, the number of operating and reporting credit unions was the same. In other years, the number of credit unions which reported was less than the number in operation.

Table 10.—Federal credit unions: Assets and liabilities, Dec. 31, 1954, and Dec. 31, 1953

Assets and liabilities	Amount			Percentage distribution	
	Dec. 31, 1954	Dec. 31, 1953	Change during year	Dec. 31, 1954	Dec. 31, 1953
Number of operating Federal credit unions.....	7,227	6,578	649	-----	-----
Total assets.....	\$1,033,179,042	\$854,232,007	\$178,947,035	100.0	100.0
Loans to members.....	681,970,336	573,973,529	107,996,807	66.0	67.2
Cash.....	97,740,682	76,710,132	21,030,550	9.5	9.0
United States bonds.....	84,313,214	86,646,022	-2,332,808	8.2	10.1
Savings and loan shares.....	143,974,932	95,728,053	48,246,879	13.9	11.2
Loans to other credit unions.....	17,737,716	15,571,638	2,166,078	1.7	1.8
Other assets.....	7,442,162	5,602,633	1,839,529	.7	.7
Total liabilities.....	1,033,179,042	854,232,007	178,947,035	100.0	100.0
Notes payable.....	19,729,224	21,481,388	-1,752,164	1.9	2.5
Accounts payable and other liabilities.....	2,772,413	12,273,236	-9,500,823	.3	.3
Shares.....	931,407,456	767,571,092	163,836,364	90.2	89.8
Regular reserve.....	31,134,017	24,811,688	6,322,329	3.0	2.9
Special reserve for delinquent loans.....	2,273,804	1,367,212	906,592	.2	.2
Undivided profits.....	45,862,128	36,727,391	9,134,737	4.4	4.3

Public Health Service

Health of the Nation

THE NATION'S HEALTH continued to be generally favorable during the past year. The death rate for 1954,¹ for example, fell to a record low of 9.2 per 1,000 population, after having remained nearly stationary at 9.6 or 9.7 for the five previous years. This drop reflects the fact that no outbreak of influenza was reported in 1954, in contrast with the four preceding years. As a result, death rates were low not only for influenza and pneumonia, but also for the cardiovascular diseases, which account for over half the deaths in the United States.

According to the most recently published life tables for the United States, for 1953, the average length of life was 68.8 years for the entire population. The average life expectancy was 66.8 years for white males, 72.9 for white females, 59.7 years for non-white males, and 64.4 for non-white females.

Infant mortality reached a new low of 26.6 deaths per 1,000 live births in 1954. Since 1936, when the rate was 57.1, the infant mortality rate has decreased annually almost without interruption. The maternal mortality rate also continued its decline; in 1954, it was 5.3 per 10,000 live births.

The greatest toll in lives was taken by the chronic diseases. In 1954, the death rate for cancer was 147.0 per 100,000 population, the highest in its gradual climb. The death rate for diseases of the cardiovascular system fell about 4 percent in 1954, largely as a result of the change in influenza incidence. More than two-thirds of all deaths in 1954 resulted from cancer and diseases of the cardiovascular system, compared with less than one-fifth of all deaths in 1900.

¹ All vital statistics are given for the calendar year.

The chief causes of death remaining among the infectious diseases in 1954 were tuberculosis, and influenza and pneumonia. The tuberculosis death rate was 10.5, and the influenza-pneumonia death rate was 25.2 per 100,000 population. The latter rate marks a record low, and may be contrasted with the rate of 33.1 for 1953 and 114.9 for 1937, when the sulfonamide drugs were introduced.

The death rate for accidents in 1954 was 56.9 per 100,000 population. For motor-vehicle accidents, the rate was 23.1, about the same as the preceding four years. For all other accidents, however, the 1954 rate was the lowest on record, 33.8 per 100,000.

Most of the infectious diseases decreased in incidence from 1953 to 1954. Reported cases of diphtheria, smallpox, and malaria, for example, showed significant reductions. Some increases were reported, however, for psittacosis, infectious hepatitis, and poliomyelitis. The number of reported cases of infectious hepatitis rose from 33,700 in 1953 to nearly 50,000 in 1954. More complete reporting probably accounts for much of this increase, since infectious hepatitis was made notifiable in many States only in recent years. In 1954, a total of 38,741 cases of poliomyelitis, both paralytic and nonparalytic, was reported, as contrasted with 35,592 reported cases in 1953.

BIRTHS, MARRIAGES, AND DIVORCES

The national birth rate continued to rise. An estimated 4,076,000 live births, including unregistered births, occurred in 1954, for an all-time high. The birth rate was 25.3 per 1,000 population, second only to the 1947 rate (26.6) in the last 25 years. About 93 percent of all registered births occurred in hospitals and about 96 percent were attended by physicians.

The number of marriages and divorces declined slightly in 1954. There were about 1,476,000 marriages in 1954, for a marriage rate of 9.2 per 1,000 population. In 1953, there were 1,546,000 marriages, for a rate of 9.8 per 1,000. Provisional figures for 1954 indicate a slight decrease in the 1953 divorce rate of 2.5 per 1,000 population.

New Programs and Responsibilities

During the year, responsibility for several new programs or for the expansion of existing programs was vested in the Public Health Service. Among the most important of these were: the broadening of the hospital and health facilities construction program; the transfer of the health and hospital service program for American Indians from the Department of the Interior to the Public Health Service, effective July 1, 1955; the transfer of responsibilities to the Service for the health aspects of civil defense, by delegation from the Federal

Civil Defense Administration; and activities in connection with the evaluation, testing, and distribution of the new poliomyelitis vaccine. The programs of hospital and health facilities construction and of health services for Indians are described in the section of this report on the Bureau of Medical Services, where these activities are located. The other two new responsibilities are covered in the following pages.

CIVIL DEFENSE

On July 14, 1954, the Federal Civil Defense Administration, with the approval of the President, formally delegated certain direct civil defense responsibilities to the Department of Health, Education, and Welfare. The Public Health Service was made responsible for: planning the health aspects of civil defense programs; providing technical guidance to the States; conducting research on the detection and control of health hazards associated with emergencies; providing training for State and local public health workers on protective measures; and providing an expanded reserve corps of professional personnel for critical areas in the event of national emergencies.

This program was planned and coordinated in the Office of Health Emergency Planning, a staff service in the Office of the Surgeon General, and operations were carried out in the various program divisions of the Service. Studies on mass immunization, for example, were begun at the National Institutes of Health. The Communicable Disease Center in Atlanta, Ga., conducted research on the detection and identification of airborne diseases, and the Robert A. Taft Sanitary Engineering Center in Cincinnati, Ohio, on the protection of municipal water supplies. Both Centers expanded their field training courses on the public health problems in civil defense. The Division of Personnel conducted recruitment and training programs to expand the emergency component of the Public Health Service Commissioned Reserve. By the end of the year, 544 appointments had been made to the Commissioned Reserve and an additional 400 applicants were under consideration. Two training courses were conducted for the emergency component on civil defense administration; on defenses against chemical, biological, and radiological warfare; and on the public health aspects of national disasters and emergencies.

During the year, the Public Health Service continued to provide technical assistance toward the solution of health and sanitation problems during natural disasters. Through the Office of Health Emergency Planning, supplies, equipment, and epidemiological aid were made available to areas stricken by floods, tornadoes, and hurricanes.

POLIOMYELITIS VACCINE

In the spring and summer of 1954, a large-scale field trial of a new vaccine against paralytic poliomyelitis, developed by Dr. Jonas E.

Salk of the University of Pittsburgh, was conducted under the auspices of the National Foundation for Infantile Paralysis. During the year, epidemiologists and other specialists from the Service's Communicable Disease Center participated in evaluating the results of the trial. On April 12, 1955, the Poliomyelitis Vaccine Evaluation Center at the University of Michigan, under the direction of Dr. Thomas Francis, Jr., reported that the vaccine, which had been used on more than 450,000 children in 44 States, had been safe and effective in substantially reducing the risk of paralytic poliomyelitis. Upon recommendation of the Public Health Service, the Secretary of Health, Education, and Welfare licensed six manufacturers to produce the vaccine.

On April 14, 1955, two days after the announcement of the results of the field trial, the President directed the Secretary to survey and report to him on the best means of assuring an equitable distribution of the vaccine. The Secretary thereupon held a series of meetings with representatives of the medical and health professions, the pharmaceutical industry, and public interest and civic groups for advice on distribution of the vaccine. The facts brought out at these meetings indicated that the vaccine would be in short supply for some time, and that a system of priorities for its use should be established. The Secretary recommended that a voluntary distribution system be instituted and that an advisory committee be set up to determine the priority schedule. The President accepted these recommendations.

The National Advisory Committee on Poliomyelitis Vaccine was appointed by the Secretary, under the chairmanship of the Special Assistant to the Secretary for Health and Medical Affairs. A small unit was set up in the Public Health Service's Division of General Health Services to serve as staff to the Committee. At its first meeting on May 2, the Committee recommended the establishment of a distribution plan which would ensure each State an appropriate share of all vaccine manufactured. Distribution within each State would be a State responsibility. It was suggested that State advisory committees be established to work with the officials designated by the Governors to carry out this responsibility. The National Advisory Committee designated the 5 to 9 year age group for first priority, since for the country as a whole, this group is most susceptible to poliomyelitis.

In its role as secretariat to the Committee, the staff in the Division of General Health Services was given responsibility for helping administer the Nation-wide vaccine distribution program; for providing consultation to the States on policies and programs for intrastate distribution and use of the vaccine; for maintaining liaison with the manufacturers on production and distribution; and for working closely

with the Division of Biologics Standards and the Communicable Disease Center on the epidemiological aspects of the program.

Late in April, cases of poliomyelitis were reported among children who had received vaccine manufactured by one of the producers. As a result, the Public Health Service requested withdrawal of the manufacturer's product and conducted a comprehensive investigation of the production and testing of the vaccine. The review led to revisions in the requirements for manufacture and testing of the vaccine, closer observation of the manufacturing processes, creation of a Technical Committee on Poliomyelitis Vaccine to advise on release of vaccine, and the initiation of a research program in vaccine development. As a result of the intensive review and the institution of revised safety and testing requirements on May 26, the production of vaccine was delayed.

In connection with the occurrence of cases of poliomyelitis, the Public Health Service established a Poliomyelitis Surveillance Unit within its Communicable Disease Center. The Unit put into effect a Nation-wide system for collecting accurate and detailed reports on all cases of the disease, whether or not associated with the vaccine. Sixteen laboratories throughout the Nation cooperated in examining and reporting upon specimens collected from cases and suspect cases. The data indicated that the cases associated with the vaccine produced by one manufacturer had the characteristics of a common source epidemic, and that the development of disease in some children was the result of the presence of live poliomyelitis virus in some distribution lots.

After this incident, and the detailed review which followed, production of vaccine was resumed, and the vaccination program proceeded without further difficulty. The Poliomyelitis Surveillance Unit continued to study vaccine performance, and to evaluate its effectiveness. The Unit was also responsible for working with State and local health officials in guarding against misdiagnosis of such diseases as encephalitis, Cocksackie virus infections, leptospirosis, and meningitis as poliomyelitis.

Funds and Personnel

In 1955, there was a total of \$306 million in funds available to the Public Health Service (see Table 1, page 137. Of this amount, about \$251 million was in appropriations and authorizations. The balance was made up of reimbursements for services to other agencies and of unobligated balances from previous years.

At the close of fiscal year 1955, the number of full-time employees in the Public Health Service was 16,225 (see Table 3, page 140). This number included 1,190 members of the regular Commissioned Corps

of the Service, 1,407 members of the reserve corps on active duty, and 13,628 full-time Civil Service employees.

On July 1, 1955, however, approximately 3,500 employees of the health branch of the Bureau of Indian Affairs, Department of Interior, were transferred to the Public Health Service. During the year, the Personnel Division completed the plans for the transfer, recruited key supervisory and administrative personnel, and, in cooperation with the officials responsible for administering the Indian health program, selected and assigned staff for the field and area stations.

Following a period of intensive study, the former Divisions of Commissioned Officers and of Personnel were consolidated toward the close of fiscal year 1954. This move was designed to provide unified administration of the Commissioned Corps and Civil Service personnel systems. In fiscal 1955, the new Division of Personnel continued its work of coordinating the two personnel systems.

Public Health Methods

The Division of Public Health Methods, continuing its staff assistance of earlier years, provides data on illness and on health personnel, facilities and services. It is also engaged in improving health survey methods and in developing methods of analyzing the costs of education for the health professions. The Division publishes the monthly periodical, *Public Health Reports*, and the Public Health Monographs, which are addressed to developments in public health research, practice, and administration.

ANALYSIS OF ILLNESS AND MORTALITY

Through participation in a series of health surveys, the Division has acquired an extensive collection of basic tabulations on illness and mortality. Consolidation of data from five or more earlier investigations has made it possible to analyze age and sex differences in the severity of various types of illness; the leading causes of death, disability, and hospitalization in six different age groups; and the causes of illness and death among infants by age in months and by birth weight. Earlier tabulations are also being used to reveal the extent and types of surgery and to study the course of illness and the medical care received among a group of people surveyed for 5 consecutive years.

Another study—by matching long-term records of tuberculin tests and periodic chest X-rays—shows the progression or absence of active tuberculous infection among a group of people studied over a 15-year period. A trial study of illness and availability for work among persons aged 45 and over is nearing completion; the data will be pre-

sented in terms of varying degrees of work capacity and desire for work. The Division also gave statistical assistance during the year in several investigations, including one indicating the effect of exposure to X-ray radiation on congenital malformations among offspring.

HEALTH PERSONNEL

A trial test of methods for analyzing the costs of educating nurses in six colleges and universities and their affiliated hospitals and public health agencies has provided a basis for a manual for determining the costs of nursing education. The manual is to be published by the National League for Nursing, which collaborated in the project with the Division of Nursing Resources and the Division of Public Health Methods. Through consultations with the American Hospital Association's Committee on Accounting and Business Practice, the manual was made as consistent as possible with the Association's procedures for estimating hospital costs.

The Division continued to work with Emory University in developing a method for determining the cost of medical education. Procedures were used on a trial basis to analyze the expenditures for the University's medical education program—including the activities of participating teaching hospitals—during the first half of the fiscal year. Methods for distributing certain costs—such as those for the hospital and the department of pathology—will require a more extensive study before undertaking the analysis for the year as a whole.

Two Health Manpower Source Books were completed during the year. Section 6, *Medical Record Librarians*, gives data obtained from a special survey conducted by the Division and the American Association of Medical Record Librarians. Section 7, *Dentists*, prepared in conjunction with the Division of Dental Resources, presents an analysis of material from the American Dental Directory, the 1950 Census, and other sources. An inventory of physicians in full-time public health activities was published during the year, representing a consolidation of data from a variety of sources.

HEALTH SERVICES

A member of the Division's staff serves as secretary to the editorial committee of the Commission on Chronic Illness, which is preparing a volume of the Commission's recommendations, conclusions, and supporting text concerning care of long-term patients. The report, to be published by the Commonwealth Fund, makes extensive use of the findings of the 1954 Conference on Care of the Long-Term Patient and its preparatory study groups.

The Division of Public Health Methods and the Chronic Disease Program of the Division of Special Health Services, with the cooperation of the Commission on Chronic Illness, conducted a field

survey and analysis of 11 programs providing medical, nursing, and related services for patients at home. This study was issued as Public Health Monograph No. 35.

National Institutes of Health

The National Institutes of Health is the principal research bureau of the Public Health Service. It conducts and supports medical and related research against a wide range of health problems. In 1955, the total appropriation to the NIH was \$81,268,000. Approximately two-thirds of this amount was awarded to non-Federal institutions, agencies, and individuals, largely to support research projects and to develop scientific manpower. During the past year, progress was made on many fronts, and some of this progress is described in the following pages.

Division of Biologics Standards

The biologics control program, initiated in 1902, has been administered since 1948 by the National Microbiological Institute. On June 8, 1955, the Secretary granted the Surgeon General authority to expand this function, and a separate Division of Biologics Standards was created.

The reasons for this step were: (1) the expanding range of diseases to which biologic products may be applicable, (2) the kinds of biologics that may become available, and (3) the shortened interval between the discovery of new biologics and their use. Principles utilized in the development of the Salk poliomyelitis vaccine offer promise in solving the baffling problems of virus diseases. Forthcoming biologics may be applicable to the control of mumps, measles, and influenza. The new Division was established in recognition of the fact that the standardization and regulation of biologic products warrant a separate administrative unit.

The Division's responsibilities are to ensure the safety, purity, and potency of biological products, such as serums, vaccines, toxins, anti-toxins, human blood, and blood derivatives, and to conduct research on the standardization of such materials. This has been the role of the Division with respect to the Salk poliomyelitis vaccine.

Two types of licensing are provided by law and regulations as a basis for control of biologics—establishment licensing and product licensing. Seven establishments were licensed this year, making a total of 129 in the U. S.; and 47 licensed establishments were authorized to produce specific products for interstate commerce. Altogether, 1,110 product licenses are in effect.

The Clinical Center

During its second full year, clinical research at the National Institutes of Health began to assume a diversity, scope, and continuity that promised much for the future. Approximately 100 separate clinical studies were under way, and results of wide medical interest began to appear in scientific journals. The Joint Committee on Hospital Accreditation, representing the Nation's principal medical and hospital associations, found that the Clinical Center met all and surpassed many of the Committee's standards. The twice-monthly clinical conferences attracted not only the active participation of the clinical staff, but also private physicians and scientists from other institutions. Several of the country's leading research physicians joined Institute clinical staffs as senior investigators, and brilliant younger applicants as clinical associates.

During the year, the number of activated beds increased from 250 to 373, with an average daily patient census of 233, and the length of stay averaging slightly more than six weeks. There were more than 10,000 visits to various followup services for continued research observation or therapy. A comprehensive rehabilitation department, headed by a well-qualified physician, was organized around the previously established physical and occupational therapy services; and a fully accredited secondary school program for patients in the younger age brackets was developed in cooperation with the Montgomery County, Md., Board of Education.

Division of Research Grants

The seven Institutes award grants to support non-Federal research within their particular fields, and the Division of Research Grants is responsible for grants not encompassed by any Institute's program. The Division also coordinates and expedites the total activity and administers research fellowships. Over the past decade, expansion of these extramural programs has been accompanied by increased support from various sources and by dispersion of research throughout the country's medical schools, universities, and hospitals.

During fiscal year 1955, research grants aided 372 institutions in 47 States, the District of Columbia, Alaska, Hawaii, and 9 foreign countries. A total of 3,261 such grants were made at a cost of \$33,901,630. Scientists also received 1,042 fellowships totalling \$2,557,902. Grants for training, including grants for teaching and traineeships, amounted to \$11,003,025, and 77 cancer field investigation grants were awarded for a total of \$1,143,874. Table 2, page 139,

shows the number and amount of awards by type and Institute concerned.

The following accomplishments are typical of those in noncategorical areas supported by the Division of Research Grants. Investigators have gained a better understanding of allergy and dermatitis, which are responsible for widespread discomfort and much industrial absenteeism. Studies in several States continue to determine the health significance of new crop sprays and insecticides, and progress in research on photosynthesis promises a fruitful source of food material. New anesthetics with less after-effect seem probable in light of studies with xenon gas. Through reproduction and growth studies, new therapeutic procedures and drugs have been developed which make the prenatal period safer. Instrumentation research produced many refinements of chromatography, titration, and electron microscopy.

Institute of Arthritis and Metabolic Diseases

Derangements of metabolism, or body chemistry, appear to underlie most of the rheumatic as well as metabolic diseases. Hence, the National Institute of Arthritis and Metabolic Diseases emphasized fundamental metabolic research in its direct and extramural operations. Laboratory studies were conducted in the fields of chemistry, biochemistry, pathology, pharmacology, and physical biology.

RESEARCH DEVELOPMENTS

One of the most significant research developments of the year became known to the medical profession and the public in November 1954, when the Institute reported its clinical trials of two antirheumatic drugs. First tested on carefully selected patients in the Clinical Center, prednisone and prednisolone (originally metacortandracin and metacortandralone) were found to be about four times as potent and, in several respects, less hazardous than cortisone. They are now available upon prescription and are being used to treat patients with arthritis, other rheumatic diseases, asthma, and a number of allergic disorders.

Several years ago Institute scientists demonstrated that a simple solution of salt and soda given by mouth was highly effective in preventing early death from shock in severely burned animals. It has now been shown that the treatment is safe and effective for human beings.

Obesity is this country's most serious nutrition problem, affecting about one-fifth of all adults. Excessive body weight is associated with serious health hazard. NIAMD scientists have increased the

weight of laboratory animals three-fold through diet and are thus learning more about weight reduction, nutrition, physiology, and biochemistry of the obese organism.

Knowledge of the ways in which the body utilizes food is vital to an understanding of the metabolic diseases. Glucose, a major metabolic fuel, was long believed to be broken down along a single pathway in the body. Now, a second pathway involving chemical reactions similar to some in photosynthesis has been discovered.

In the normal human being, ketone bodies are metabolic intermediates, formed and quickly destroyed. In the diabetic, however, they tend to accumulate in the blood, threatening ketosis and sometimes leading to coma and death. Important early detection will be facilitated by the development of an accurate technique for measuring ketone bodies in minute quantities.

Institute investigators have shown that the proximal tubule of the kidney can be divided into two clearly defined sections. Recognition of this may lead to demonstration of differences in physiological function, with implications for improved treatment of renal diseases.

Steroids such as cortisone, hydrocortisone, prednisone, and prednisolone constitute the most effective weapons against rheumatoid arthritis. It is important to learn more about their production and action. By means of radioactive steroids, it has been found that normal man produces about 20 milligrams of hydrocortisone daily, that about two milligrams are present in the body at any time, and that the body's total supply is renewed about ten times a day. The biological mechanism that destroys or inactivates hydrocortisone and related compounds has been fairly well defined.

RESEARCH GRANTS PROJECTS

Diabetics are known to be susceptible to atherosclerosis (hardening of the arteries), but the nature of the relation between the two diseases is not clear. Grant-supported investigators have found that the blood of patients in diabetic coma, like that of atherosclerotics, contains an increased amount of certain fatty substances, lipoproteins.

The connective tissue of the body plays an important role in the rheumatic diseases. A substance isolated from connective tissue, hyaluronic acid, has been broken down by enzymes, resulting in the discovery of hitherto unknown polysaccharides. In another study of connective tissue, its chief constituent, collagen, has been found to dissolve when treated with a chemical. Another chemical restores the collagen to its original condition. The changes in its structure were determined through use of an electron microscope, using magnifications up to 40,000 times.

In research on methods for rehabilitating severely crippled arthritics, 13 of 17 disabled patients in one treated group were discharged

from the hospital. These patients are now wholly or partially self-sufficient. Of 21 less severely disabled patients, all have been discharged; 16 of these patients are completely, and 5 are partially self-sufficient.

Vitamins can prevent congenital abnormalities in laboratory animals. NIAMD-supported scientists found that the offspring of mother animals on diets deficient in folic acid, vitamin B₁₂, or riboflavin may have such congenital abnormalities as hydrocephalus, missing or deformed eyes, or malformations of the skeleton. Addition of vitamin B₁₂ to the diet prevented or markedly reduced these conditions.

Cancer Institute

Advances on several fronts marked the eighteenth year of the National Cancer Institute's program to reduce cancer incidence and mortality through studies of causation, diagnosis, treatment, and prevention. All phases of cancer research—fundamental and applied, laboratory and clinical—were conducted at the same or higher levels of support.

NATIONAL CHEMOTHERAPY PROGRAM

Cancer remains the second leading cause of death despite important recent gains. During the year a concerted effort was made to accelerate progress in the treatment of cancer with chemicals, under sponsorship of the country's leading institutions and agencies in this field. A guiding Cancer Chemotherapy National Committee of ten members was established, four technical panels were set up, and headquarters were established at the Cancer Chemotherapy National Service Center in the National Institutes of Health. This activity was supported in the amount of \$2,700,000, an increase of \$1.7 million over the previous year.

LABORATORY AND CLINICAL RESEARCH

Studies suggest that various chemical compounds act by interfering with reactions of enzymes that control metabolism. In some cases, these enzymes are involved in the respiration of tumor cells. Tumor-damaging agents from natural sources have been fractionated, and chemists are isolating and identifying the compounds responsible for the activity. These are among the research studies conducted at the National Cancer Institute that continue to expand knowledge in this field.

Exposure of tumor-bearing mice to temperatures markedly different from their usual environment retards the growth of some cancers.

Institute scientists found that decreased growth rate is accompanied by decreased glycolysis—fermentation yielding energy for tumor growth. Glycolysis, in turn, seems to be controlled by a balance of hormones. This finding is being used in studying the reactions of cancers in human beings to drugs.

A chemically defined medium devoid of protein was developed for the growth of cells in tissue culture, contributing valuable information on cellular growth requirements. The new medium, containing amino acids, vitamins, and other components, has maintained several cell types in satisfactory proliferation.

In studies aimed at a better understanding of biological effects of radiation, female mice of specific hybrid derivation produced only one litter after receiving 100 to 400 r. of X-ray to the whole body, whereas 300 to 500 r. were required to lower fertility to the same extent by irradiation of exposed ovaries. Doses in the same ratio were required to produce ovarian neoplasms. In another study, Institute scientists succeeded in transplanting large pieces of skin between two genetically incompatible strains of mice by treating the recipients with X-ray and injections of bone marrow.

Diffusion chambers were devised which permit growth of normal and malignant cells within the body of an animal in which they would otherwise expire. This new development enables investigators to define factors governing transplantability of tissues.

In Memphis, Tenn., the cytologic test continued to detect uterine cancer at an early curable stage. During the three years of the project, over 100,000 women have been examined, and about 40,000 of these were reexamined in the first recall program. Localized carcinomas of the cervix continue to exceed the expected number.

BIostatistical and Environmental Field Studies

Cancer morbidity surveys in 10 metropolitan areas and the State of Iowa were analyzed and published. Survival of cancer patients in 10 cities and the State of Connecticut is being analyzed. Smoking habits of a cross section of the U. S. population were surveyed with the Bureau of the Census, and studies on the possible relationship between cigarette smoking and lung cancer were continued. Other studies are in progress to determine the incidence of cancer among various population groups, including occupational and cultural groups.

Studies Supported by Grants

Of the 720 cancer research grants, 146 were for work related to cancer chemotherapy. Studies on combination chemotherapy of mouse sarcoma 180 showed that interaction takes place in 55 of 120 combinations of agents tested. In some cases, summation of effects

or even potentiation was observed. In another study, new chemicals that may be useful in the treatment of tumors of the prostate were synthesized and tested. Sixty-two compounds of more than a dozen types were investigated, and four of these, in the 9-iminofluorene series, gave impressive histological results.

Improved techniques were developed for the growth of human cancers outside the original host. Certain human tumors, particularly epidermoid carcinomas, grow rapidly when implanted subcutaneously in the rat and in the cheek pouch of the hamster.

Institute of Dental Research

Dental diseases are among the costliest and most prevalent of the Nation's health problems. The National Institute of Dental Research is seeking knowledge of the underlying causes of dental diseases, so that better methods of prevention, diagnosis, and treatment can be devised. During the past year, progress was made in both basic and clinical studies by the Institute and its grantees.

RESEARCH ACCOMPLISHMENTS

Scientists at the National Institute of Dental Research, using diets by which human caries was simulated in rats, found new evidence that the diet can influence the development of tooth decay. In rats fed dry milk powder, the incidence and severity of tooth decay were shown to parallel the intensity of heat with which the powder was processed. Further study showed that processing caused loss of lysine, an essential amino acid. When lysine was restored to the diets, caries was reduced greatly. These discoveries open the way to a new field of dental research—evaluation of the possible role of heat-processed commercial protein foods in the production of tooth decay.

Clues to the role of oral bacteria in the development of caries were found in experiments using antibiotics to control tooth decay. The testing of many antibiotics indicated that microorganisms susceptible to penicillin and bacitracin may cause caries in rats. Clinical study was begun to evaluate the usefulness of bacitracin in controlling tooth decay in human beings.

Gains were made in laboratory, clinical, and field studies of ingested fluorides and their relation to the entire physiology of the body as well as to dental caries. Experiments with young rats showed that fluorides do not interfere with growth or calcium metabolism of bones. Long-term studies on fluoridation of water supplies in Michigan and Maryland yielded additional proof of the effectiveness and safety of this procedure for partial prevention of tooth decay.

Among advances in electron microscopy of dental tissues was the development of techniques for demonstrating the crystal structure of teeth. Much more can now be learned about the composition of dental tissues and the ways in which disease damages them, and the new techniques are applicable to many other tissues of the body.

In research on pyorrhea, techniques were devised for chemical analyses of tissues that surround and support the teeth. It should now be possible to determine degenerative changes that occur with the progress of periodontal diseases. Institute scientists also developed methods useful in establishing the character of normal oral tissues and detecting the changes caused by diseases.

Among problems investigated clinically were malocclusion, cleft palate, and cleft lip; the treatment of caries and periodontitis; the relation of bacteria and viruses to human dental disease; and the evaluation of general anesthesia used in oral surgery. A new diagnostic index for periodontal disease (pyorrhea) showed considerable promise in tests at the Clinical Center. Field trials are being conducted to determine the usefulness of the index in collecting data.

GRANT-SUPPORTED RESEARCH

The Institute supported 49 dental research projects by non-Federal scientists, 23 more than in 1954. Training in research was expanded by the establishment of part-time fellowships for dental students.

One group of grantees discovered several species of oral bacteria with unusual nutritional requirements. This may help explain the role of bacteria in causing or preventing diseases of the teeth and mouth. Another grantee completed a comparative study of the teeth of man and lower animals, with particular reference to caries susceptibility. He found human teeth inferior to those of chimpanzees and monkeys, and studies to determine the reasons are in progress.

Although a direct relation between caries and sugar or starch ingestion has been established, little is known of the exact functions of carbohydrates in producing tooth decay. A grantee is developing tests to permit studies of the levels of starch-digesting enzymes in saliva. In early work he has found significant differences in the saliva of children with high and low incidence of caries.

Heart Institute

Heart disease is the leading cause of death, a major disabler, and a tremendous economic burden on the Nation. Progress against heart disease requires new medical knowledge and the full application of knowledge that is already known. In 1955 the National Heart Institute continued to direct its resources toward these ends.

Research by the Institute resulted in significant contributions to the understanding of heart and blood vessel diseases. Support of research in universities and hospitals also produced important advances, and training programs of the Institute helped relieve shortages of personnel skilled in the cardiovascular field. Grants-in-aid to the States, provided in conjunction with the Bureau of State Services, assisted in the development of community heart disease control programs. Emphasis was placed on the campaign for prevention of rheumatic fever, and new materials, including a film, "Stop Rheumatic Fever," were produced for educational use.

RESEARCH ACCOMPLISHMENTS AT NHI

Atherosclerosis, a disease of blood vessels, is characterized by the deposition of fatty substances in vessel walls, leading to narrowing of the blood channels and eventually to closure and clotting. Atherosclerosis is the cause of most heart attacks as well as disorders in other parts of the body. It has been found that when the anti-clotting substance heparin is injected, a series of chemical reactions causes the disappearance of certain fatty substances from the blood. Further studies of this system have shown the "clearing factor" to be normally present in fatty tissues; heparin merely causes it to overflow into the blood. In the tissues, this enzymatic factor, named "lipoprotein lipase" to describe its function, breaks down large fat-bearing protein molecules, which can then be utilized in the tissues or redeposited as fat. If the system is in any way deficient, fat-bearing proteins are not removed from the circulating blood rapidly and may contribute to the development of atherosclerosis.

Progress was made toward the clarification of the abnormal salt and water retention that characterizes heart failure, the end result of many heart diseases. In earlier Heart Institute work, increased secretion of a salt-retention hormone by the adrenal glands was shown to be an essential feature. Current efforts dealing with the normal control of this secretion indicate that reduction in the volume of body fluids and increase in the concentration of potassium are major stimuli. The problem of localizing the site where such stimuli exert their effect is under investigation. Research on the decreased water excretion of heart failure patients has revealed that the ability to put out large amounts of water in the urine is greatly dependent upon the maintenance of a high level of filtration by the kidney.

Advances have been made in the field of drug therapy. Reserpine, a substance derived from *rauwolfia*, the Indian snakeroot, is widely used in the treatment of hypertension for its mild blood-pressure-reducing effects and its sedative or tranquilizing activity. Institute studies have shown that the administration of reserpine causes the

release of large amounts of serotonin in the body. Serotonin, a substance normally present, has been under study for some time because it was originally believed to play a role in the regulation of blood pressure. The current studies strongly suggest that it may be importantly involved in brain function and that the effect of reserpine on blood pressure may be mediated in that way.

Another drug, newly isolated in Heart Institute laboratories, apparently exerts a marked effect on blood pressure by a unique type of action in the brain. This material is derived from the seeds of a Central American tree, *Ormosia panamensis*. It has shown promising pressure-lowering effects in dogs and will soon be put into clinical trial in patients with hypertension.

ADVANCES THROUGH RESEARCH GRANTS

Investigations supported by Heart Institute grants resulted in a number of important findings. One study indicated that the link between a streptococcal infection and heart damage resulting from rheumatic fever may be an enzyme, streptococcal proteinase, produced by certain strains of the bacterium *Streptococcus*. Application of the enzyme to cultures of heart muscle caused rapid destruction of the tissue. When introduced into the blood of an experimental animal, the enzyme seemed to be specific for heart muscle, since other tissues were not damaged.

A new drug for relief of high blood pressure, called SU-3088, was reported during the year. It acts on the nerve centers and appears to be more uniformly effective than other drugs of this type. Pentapyrrolidinium is another recently introduced drug that promises to be useful. Recent studies of hexamethonium, a blood-pressure-reducing drug now in current use, indicate that it may also benefit certain patients with congestive heart failure.

Surgical repair of heart defects present at birth, as well as those caused by disease, continued to receive much attention. Operations inside the heart can best be performed if the flow of blood through the heart is temporarily stopped while the patient is undergoing surgery, yet the blood must continue to be oxygenated and pumped through the patient's body. A promising technique for accomplishing this, developed and successfully used in the past year, involves use of a mechanical pump as an artificial heart and a dog's lung for oxygenation.

Institute of Mental Health

With 10,000 new beds needed each year for mentally ill patients, it is a pressing question how and where the current medical knowledge and trained personnel can best be used in this field. The 84th Con-

gress held extensive hearings on legislation to provide for a nationwide reappraisal of the human and economic problems of mental illness. A few days after the close of the fiscal year, the Mental Health Study Act, authorizing such a survey, was passed.

In line with efforts to utilize existing resources fully, various regions of the country have initiated programs to provide for cooperative regional use of training and research facilities. During the year, the National Institute of Mental Health awarded a grant to the Western Interstate Commission on Higher Education to inventory resources for training and research in eleven Western States.

TRAINING AND COMMUNITY SERVICES

During the year, the Institute initiated the Career Teacher Training Program, designed to encourage young men and women to enter the mental health teaching profession, particularly in psychiatry and psychiatric nursing. The program also affords opportunity for part-time research work.

Through financial assistance and technical consultation, the Institute aids the States in various community mental health activities. In six rural counties of Georgia, for example, the public health nurse serves as the link between the State mental hospital and the patient's family. Several other States are developing similar programs to facilitate the return of the patient to the community.

A special consultation service to mental hospitals was reorganized within the Institute. In addition, the States were assisted in developing broader services for prevention of mental illnesses, child study, day care, home care, rehabilitation, and follow-up of patients. For the first time, uniform data on a nationwide basis were collected on outpatient mental hygiene clinics.

CLINICAL AND LABORATORY RESEARCH

A major part of the Institute's direct research program is based on psychotherapy, one of the basic treatment techniques. Studies are being conducted in the course of treating adult victims of schizophrenia, the illness suffered by half of the Nation's hospitalized mental patients.

To a large extent, clinical investigations at NIMH seek improved methods for treating patients in a mental hospital. There is increasing evidence that the relationships between patients and those who care for them have an important bearing on the course of treatment. One of the goals of the Institute's clinical program is to develop a setting in which all contacts of the patient with other patients and the staff can be controlled and utilized. Patients who have not responded to other treatment methods have shown marked improve-

ment. Efforts are also being made to develop ways of using present knowledge in the treatment of larger groups.

Institute scientists also continued fundamental research in such broad areas as the nervous system, the biochemical basis of behavior, psychological processes in human development, social determinants in mental illness, and emotional factors of physical disorders.

Neurophysiologists made important contributions to knowledge of neurologic disorders related to the brain's circulation. A method was developed for estimating blood flow to different brain areas through determination of the rates at which they take up a radioactive gas, trifluoro-iodomethane. Blood flow rates to the whole brain and to 30 regions were calculated. The fuel requirements of the conscious brain remained the same regardless of the work the brain was doing, but under anaesthesia and in various types of comas the requirements were markedly reduced.

Scientists view the new drug, lysergic acid diethylamide, or LSD, as a valuable tool for studying mental disorders. Minute amounts induce hallucinations and other symptoms strikingly like those of schizophrenia. Recently NIMH scientists found that an important site of LSD action in animals was the lateral geniculate nucleus, the relay station in the brain where visual impulses interact with others before passing on to appropriate areas of the cortex.

Since psychotherapy is a technique primarily concerned with giving mental patients a more workable set of attitudes for living in society, the learning process itself would appear to enter into this form of treatment. A number of studies under way deal with the nature and extent of learning during psychotherapy.

Social scientists have established new data on the relation between social isolation during early youth and the later development of schizophrenia. In contrast with much current thinking, results suggest that social isolation is more likely to be a consequence of the disease than a cause.

RESEARCH GRANTS PROJECTS

Numerous studies of child development were supported, including some on prenatal development as a possible factor in schizophrenia, origins of mental deficiency, effect of parental maturity on child development, and emotional effects of chronic physical illnesses. Other subjects included psychosomatic disorders, biochemical processes associated with mental disorders and aging, EEG patterns in temporal lobe epilepsy and the normal brain, and effects of hormones on mental health and illness.

Recent research aided by the Institute has explored the effect of the hospital environment on the mental patient. For example, one study

has shown that the manner in which staff members interact with one another and with the patient can directly affect the patient's progress. "The Mental Hospital," a comprehensive report of this research, has been of great interest to those concerned with hospital administration.

Microbiological Institute

In its laboratory and clinical investigations, the National Microbiological Institute contributed new knowledge on prevalent infectious diseases. Striking achievements were made, for example, in tissue culture and in virology.

DIRECT RESEARCH

Although the technique of growing viruses within tissues living in test tubes has been used for several years, much information of a fundamental nature remains unknown. Methods have been found for utilizing only a few types of tissue in this work—notably monkey kidney tissue and the so-called HeLa cell taken from human cancer. The principal obstacle has been a dearth of knowledge concerning the precise nutritional requirements of various types of cells.

Recently, a scientist of the Microbiological Institute demonstrated that 12 amino acids, the building blocks of protein, are essential to the growth in tissue culture of a malignant human cell and a normal strain of mouse connective tissue. Omission of any one of the amino acids from the medium resulted in cell degeneration and death. These findings should extend and simplify the use of tissue culture for virus propagation and facilitate the study of interaction between invading viruses and host cells. They are also expected to throw light on basic metabolic processes.

Encouraging progress has been reported in research on virus infections of the upper respiratory tract. The agents under study are the adenoidal, pharyngeal, conjunctival viruses, known as the APC viruses. During the year, Institute scientists were called on to investigate an epidemic in the Washington, D. C., area and were able to identify the causative agent as a type-3 APC virus. Laboratory studies demonstrated that APC infections, which cause a substantial amount of illness, produce a good immune response. This knowledge enabled the scientists to develop an experimental vaccine and to launch a human volunteer study to determine whether immunization against such infections is feasible.

Advances in other areas—ocular toxoplasmosis, amebic dysentery, and basic studies of antigens—emphasized the rapid progress being made in microbiology, as well as growing awareness of the significance of infectious disease on chronic disorders.

GRANT-SUPPORTED RESEARCH

Several highly significant findings were reported by grantees in the past year. In a study of Q fever, for example, investigators were able to prove that contaminated wool is a source of infection for persons connected with wool harvesting. At Tulane University, a grant-supported clinical evaluation of a new vaccine against epidemic typhus showed promising results. And at the University of California, grantees reported evidence suggesting a direct relation between canine distemper, the commonest proved viral disease of dogs, and a respiratory tract infection of human beings.

Institute of Neurological Diseases and Blindness

Advances in knowledge of the structure and function of the nervous system and the brain marked the past year's research efforts of the National Institute of Neurological Diseases and Blindness. Progress in the diagnosis and treatment of neurological and sensory diseases rests firmly upon basic knowledge gained through the biological and behavioral sciences.

DIRECT RESEARCH

Recent advances include the development of an electrical waveform harmless to the cells of the brain. This is a practical tool for the neurophysiologist, neurosurgeon, and others who require a safe and convenient technique for examining and stimulating the human brain in diagnosis and therapy. Another valuable diagnostic tool, a continuous performance test, was developed for differentiating subjects with brain damage from those without damage.

A progressive fall in cerebral blood flow and over-all cerebral metabolism has been shown to accompany advancing age in humans. These findings may be related to psychological changes that occur with aging.

In collaboration with the Naval Aero Medical Laboratories, a method was developed for the rapid, continuous measurement of cerebral blood flow in man. Another project yielded a technique for quantitative measurement of regional circulation in the brain and other organs—an invaluable tool for basic research in cerebral palsy.

CLINICAL PROGRESS

A deficiency of glutamic acid in the brains of epileptic patients has now been clearly demonstrated. In brain tissue removed from such patients during temporal-lobe surgery, the deficiency can be corrected *in vitro* by the addition of glutamine or asparagine. These com-

pounds, which have no toxic or sedative effects, are being used with considerable success in epilepsy of various types.

More than 100 patients have been treated surgically for intractable seizures related largely to lesions of the temporal lobe. Although it is too early to evaluate results, it is estimated in view of past experience that 50 percent of the cases will be relieved of seizures, 25 percent partially relieved, and 25 percent will present no change.

As a result of the combined work of scientists in NIAMD and NMI, the cause of one form of uveitis, a blinding eye disease, has been found, and a rational method of treatment has been established. The toxoplasma parasite has been isolated from the human eye and, in clinical trials, has yielded to treatment with daraprim and sulfadiazine.

In multiple sclerosis, certain supporting cells of the nervous system, oligodendroglia, have been found to disappear at the site of destruction of myelin. These supporting cells are believed to play some role in myelin formation and nutrition. Isoniazid proved unsuccessful in multiple sclerosis patients.

At a special conference in New York City in mid-December, the legislative committee of the American League Against Epilepsy, composed of a group of the country's leading neurologists, discussed and recommended radical revision of State laws affecting epileptics. These recommendations were made in the light of a two-year study, supported by an Institute grant. They concerned legislation regarding marriage, sterilization, employment, and operation of motor vehicles.

Bureau of Medical Services

The Bureau of Medical Services administers the programs of the Public Health Service which relate to care of the individual. It operates the hospital and outpatient facilities of the Service and exercises professional supervision over personnel assigned to other Federal agencies for the administration of medical and hospital programs. Other Bureau programs include the construction of hospital and medical facilities; the development of hospital, nursing, and dental resources; and foreign quarantine.

Hospitals and Medical Care

The Division of Hospitals conducts the medical care program for American seamen and other legal beneficiaries of the Public Health Service. Besides American seamen, beneficiary groups include officers and enlisted men of the U. S. Coast Guard, officers and crewmembers of the Coast and Geodetic Survey, commissioned officers of

the Public Health Service, Civil Service employees of the Federal Government injured or taken ill in the course of their work, and several smaller groups. Persons with leprosy and men and women who are addicted to narcotic drugs as defined by statute also receive treatment in special facilities maintained by the Service.

The Division of Hospitals also administers the Federal employee health program. Under it, Federal departments—at their request—receive consultative help in establishing or improving health activities for their personnel. On a reimbursable basis, 18 separate health units are conducted through the Federal employee health program.

In 1955, the Division maintained 16 hospitals, 25 outpatient clinics, and 96 outpatient offices; in addition, 58 physicians served active Coast Guard and Coast and Geodetic personnel. Of the hospitals, 12 provide general medical and surgical services, one is exclusively for patients with tuberculosis, two treat narcotic addiction and neuropsychiatric disorders, and one—at Carville, Louisiana—cares for persons with leprosy. Most of the hospitals are located in major port cities, such as Boston, New York, Baltimore, New Orleans, San Francisco, and Seattle. Outpatient clinics and offices are located in other areas with a high concentration of Service beneficiaries. Staffed by full-time personnel, the clinics provide a range of medical, dental and allied health services. Local physicians also provide outpatient services in their offices on a part-time basis, as needed.

VOLUME OF SERVICES

The volume of services rendered by the Division of Hospitals in 1955 showed only moderate declines, compared with the two previous years. Inpatient admissions in all of the Public Health Service hospitals fell 5 percent—from 48,282 in 1954 to 45,852 in 1955. Meanwhile, the average daily patient census dropped 4 percent—from 5,640 to 5,428. However, outpatient visits declined only 2 percent, and remained over the 1,000,000 mark. The general hospitals admitted 41,379 patients in 1955, compared with 43,329 in 1954. The daily number of patients at these stations averaged 2,768, or 6 percent fewer than the 1954 average.

The tuberculosis hospital at Manhattan Beach, Brooklyn, N. Y., operated at slightly above its 325-bed constructed capacity. It maintained an average daily census of 339 throughout the year, a decrease of only 4 from 1954.

The Public Health Service hospitals for narcotic drug addiction at Lexington, Ky., and Fort Worth, Tex., admitted 4,018 patients during 1955, a decrease of 11 percent from 1954. The average daily census of all addict patients remained unchanged from the previous year.

CLINIC SERVICES

Several of the Division's outpatient clinics became part of the outpatient sections of hospitals in the geographic areas in which they are located. The clinics at Cleveland, Ohio, and Buffalo, N. Y., were merged with the Public Health Service Hospital at Detroit, Mich.; and the clinics at Pittsburgh, St. Louis, and Portland, Maine, with the PHS hospitals in Baltimore, Chicago, and Boston, respectively. The principal medical officers assigned to the clinics were designated as chiefs of their individual outpatient units, and, in day-to-day operations, represent the medical officer in charge of the hospital who has general supervisory responsibility. This procedure provides closer professional supervision over the smaller facilities, and promotes economy and efficiency in the utilization of the personnel, equipment, and resources available to the Division.

PROFESSIONAL EDUCATION

In 1955, eight Service hospitals were approved for postgraduate training of physicians by the American Medical Association. The American Dental Association also approved eight Service hospitals for dental internships. On July 1, 1955, 88 medical interns, 30 dental interns, and 111 residents were on duty. At several hospitals, qualified trainees participated in approved professional education programs in dietetics, pharmacy, physical therapy, occupational therapy, social service, medical record library science, anesthesiology, medical technology, X-ray technology, and hospital administration.

During the year, the Division of Hospitals extended its training resources to the United States Coast Guard. Following a request received last year from the Coast Guard, the nursing branch of the Division surveyed the course for hospital corpsmen conducted at the Coast Guard Training Station, Groton, Conn. Among the changes recommended were the addition of instruction in nursing arts and eight weeks of actual clinical nursing practice. This practice is being provided at the PHS hospital in Staten Island, N. Y., with a first class of 15 students which started in April.

FREEDMEN'S HOSPITAL

Freedmen's Hospital, the clinical teaching arm of the Howard University School of Medicine, has 335 general beds, 50 bassinets, and a 150-bed tuberculosis annex. In 1955, the hospital admitted 11,091 inpatients, a decrease of 655 from the year before. The 1955 daily inpatient census averaged 378, compared with 440 in 1954. The outpatient department reported 49,827 visits to its 33 organized clinics, for an average of 204 visits per day. Registration of new patients

totaled 5,866. Each of these figures represents a decrease from 1954, when 56,061 visits, averaging 227 per day, and 6,487 new registrants were recorded.

Forty-two residents, 3 interns, 17 externs, and 2 fellows received advanced medical training. There were also 2 dental interns at the hospital. Student enrollments at the School of Nursing totaled 103. Other approved hospital training programs conducted at Freedmen's included 10 dietetic internships, 2 pharmaceutical internships, and 1 administrative residency.

During the year, the Secretary of Health, Education, and Welfare appointed a commission to study the hospital and make recommendations regarding its future. After a 3-month survey, the commission recommended the continuation of the hospital and cited the need for new construction and for additional funds to care for indigent patients. The commission also recommended that the administration of Freedmen's be transferred from the Department of Health, Education, and Welfare to the Board of Trustees of Howard University, and that the Federal Government bear the initial expense of new construction and continue to support the hospital for a reasonable period of time thereafter.

Foreign Quarantine

For the second straight year, the Nation was free of cases of quarantinable disease—smallpox, cholera, yellow fever, plague, louse-borne typhus, and relapsing fever. This is the second year in the country's history that no smallpox has occurred here.

Yellow fever moved into two areas of Venezuela where it had been absent for many years. The first *Aedes aegypti* transmitted outbreak anywhere in 20 years occurred in Port-of-Spain, Trinidad. In its 7-year advance through Central America, yellow fever reached San Pedro Sula in Honduras near the border of Guatemala. The disease appeared near Belem, Brazil, after an absence of six years from that area.

These outbreaks highlighted the need for revising the yellow fever provisions of the International Sanitary Regulations. An amendment initiated by the Division of Foreign Quarantine was approved by the Eighth World Health Assembly, and will become effective in October 1956. The amended Regulations provide for abolishing the yellow fever endemic zones and declaring any area where the yellow fever virus is present in man or other vertebrates an infected local area. Under the new system, measures may be taken promptly against any area where yellow fever is present.

In France there was a smallpox outbreak of about 90 cases with 15 deaths. This disease is extremely prevalent in Colombia and Ecuador and several Brazilian and Bolivian cities.

The British Virgin Islands were added to the areas from which ships and airplanes are usually exempt from quarantine inspection upon arrival in the United States. These Islands have been free from quarantinable diseases for many years.

INTERNATIONAL TRAFFIC VOLUME

International traffic subject to Service health requirements increased noticeably, as follows: airplanes inspected for quarantine or immigration-medical purposes from 47,307 in 1954 to 54,759 this year; ships inspected from 27,171 to 27,551; arriving persons subject to foreign quarantine regulations from 39,231,904 to 42,861,862; smallpox vaccinations given by quarantine officers from 283,456 to 481,190; persons released under surveillance (subject to further medical examination at destination) from 3,202 to 17,831; persons detained in isolation at ports from 15 to 229.

MEDICAL EXAMINATIONS

In the Refugee Relief Program of immigration, medical examinations were performed by Service officers in Austria, Belgium, England, France, Germany, Greece, Italy, Jordan, The Netherlands, Turkey, and the Far East. Among the 38,928 refugees examined abroad, 882 were found to be excludable under immigration law; and 4,628 had other physical conditions that may cause exclusion or require posting of bond. At United States ports 26,882 refugees were examined; 10 were certified for excludable disease and 3,022 for physical conditions that may have caused exclusion or required posting of bond.

Of aliens other than refugees, the number examined abroad by Service officers increased from 147,539 in 1954 to 158,074 this year. Those examined in this country increased from 1,671,885 to 1,861,787. Aliens certified for excludable diseases abroad and in the United States numbered 3,950.

The Farm Placement Program of recruiting agricultural workers from Mexico completed its fourth year under Public Law 78, 82d Congress, as amended. At "migratory centers" in Mexico, 263,376 applicants were examined under supervision of Service officers; smallpox vaccinations were also administered. The rejection rate for physical and mental diseases and defects was approximately 2.1 percent. At "reception centers" on the border, Service personnel gave further examination, including X-ray screening, to 240,070 arriving recruits, and complete examination to 100,000 making initial application at the border; the rejection rate for these two groups was approximately 1.7

percent. The over-all rejection rate for the total of 363,376 applicants examined at reception centers and migratory centers was approximately 3.1 percent.

SERVICES FOR TRAVELERS

The new edition of the booklet, Immunization Information for International Travel, was distributed to Service facilities, health departments, transportation companies, and others concerned with international travel.

Twenty-two additional yellow fever vaccination centers were designated pursuant to World Health Organization requirements, bringing the total to 33 centers in the Service and 68 in other public and private facilities.

Control measures were applied to more than 30,000 airplanes arriving at United States ports, to kill mosquitoes and other insect vectors of disease.

Hospital and Medical Facilities

During the fiscal year, the Congress enacted the Medical Facilities Survey and Construction Act of 1954 (Public Law 482), and this was approved by the President on July 12, 1954. This measure broadened the hospital survey and construction program, originally established in 1946, by authorizing annual allotments for the construction of hospitals for the chronically ill, nursing homes, diagnostic and treatment centers, and rehabilitation facilities.

Authorization was also given for an appropriation of \$60 million annually through the 1957 fiscal year to assist in paying part of the costs for the construction and equipment of the four types of facilities. Total amounts authorized annually are: \$20 million each for chronic disease facilities and diagnostic and treatment centers, and \$10 million each for nursing homes and rehabilitation facilities. For fiscal year 1955, a total of \$21 million was appropriated by the Congress to assist in the construction of the four types of facilities. In addition, \$75 million was appropriated for the previously authorized construction program.

This program is administered by the Division of Hospital and Medical Facilities. During the year the Division developed guide materials for the States and others on the changes involved in the broadened program, consulted with outside groups, and prepared program plans and policy procedures.

By the end of the fiscal year, most States were well on their way towards completing their inventories and developing comprehensive programs for the provision of ambulatory care and preventive health

services, acute hospital care, long-term hospital and nursing home care, as well as rehabilitation services.

The original Hospital Survey and Construction Act was enacted in 1946. Project approvals by the States and the Public Health Service started under this program in July 1947. The first hospital was completed and opened on October 15, 1948. By June 30, 1955, 2,514 hospitals, public health centers, and related facilities had been approved; 1,905 of these were completed and 503 were under construction. The remaining projects were in the planning and pre-construction stages.

Projects approved to June 30, 1955, will add 118,814 hospital beds and 547 public health centers to the Nation's resources, as well as many related facilities, such as laboratories and nurses' homes and training facilities. Of the total number of beds, 97,380 are in general hospitals; 11,166 are in mental hospitals; 6,748 are in tuberculosis facilities; and 3,520 are in chronic disease facilities. The total construction cost of these projects is \$2,056,000,000, toward which the Federal Government contributed about a third (\$671 million) and State and local sources, two-thirds (\$1,385,000,000).

Of the 949 completely new general hospitals being built under the program, 525 (55 percent) are located in communities which had no hospitals, and 207 (22 percent) are located in communities where the only hospital was obsolete or unacceptable. Of the new facilities approved, 55 percent are located in communities of less than 5,000 population and only 11 percent in cities which exceed 50,000 population. Of the new hospitals, 57 percent have fewer than 50 beds and only 21 percent have 100 beds or more.

The original State surveys showed that the Nation had approximately 868,000 acceptable hospital beds, with a deficiency estimated to be more than 900,000 beds. While this program has been able to assist in providing almost 119,000 beds, and while almost twice as much hospital construction has been completed without Federal aid, needs are accentuated by an annual population increase which exceeds 2.5 million. In addition, every year large numbers of hospital beds become obsolete or in need of modernization.

Indian Health Services

On July 1, 1955, the Public Health Service assumed responsibility for the provision of medical care and public health services to approximately 315,000 American Indians and 35,000 Alaska Natives. This responsibility was transferred from the Department of Interior's Bureau of Indian Affairs in accordance with Public Law 568, 83rd Congress, enacted in August, 1954. Previously, the Public Health

Service detailed medical and other Public Health Service officers to the Bureau of Indian Affairs for the Indian health program.

A new division—the Division of Indian Health—was created within the Bureau of Medical Services at the start of the 1956 fiscal year to administer this program. About 3,500 employees, most of whom are located in hospitals and area offices in the western parts of the country, were transferred from the Bureau of Indian Affairs with the program.

Also involved in the transfer were approximately 970 buildings and other structures in 23 States and Alaska. These include 56 hospitals, 21 field health centers, 13 boarding school infirmaries, field clinic stations, quarters units, and supporting structures such as heating plants, laundries, warehouses, and garages. The real property inventory is estimated at an approximate valuation of nearly \$40 million.

Administration of the health program for Indians and Alaska Natives presents a new challenge to the Public Health Service. In many respects, health conditions among the Indians are similar to those that prevailed in this country about a half century ago, when limited knowledge of sanitation, hygiene, and preventive and curative measures resulted in extensive sickness and early loss of life. Preventable diseases which are under control in the general population still account for high death rates among the Indian peoples.

To meet these problems, the new Division made plans for a two-fold approach: (1) expansion of the medical care program to provide clinic and hospital services to as many Indians as possible who need such care; and (2) acceleration of public health and preventive services among the Indians. This will be done through expansion of field health facilities and services, public health nursing activities, maternal and child care, school health, sanitation, health education, and dental services.

Dental Resources

During the year the Division of Dental Resources continued to work toward defining the problems associated with the supply, distribution, and utilization of dental manpower.

DENTAL MANPOWER

At the request of the Oklahoma State health department, a study was made of the future dental manpower requirements in Oklahoma. In this study, the anticipated need for dentists was found to be sufficient to justify the addition of dental training facilities to the State educational system. The study technique used in Oklahoma provides a pattern of analysis for other States anticipating future shortages of

dentists. At the request of the Western Interstate Commission for Higher Education, the Division has undertaken a similar study of all the States in the Mountain and Pacific regions. This study is being conducted in collaboration with an advisory committee appointed by the Commission and with the assistance of the W. K. Kellogg Foundation and the American Dental Association.

A survey of the costs to students of attending dental and dental hygiene schools, initiated in fiscal year 1954 in collaboration with the Council on Dental Education of the American Dental Association, is nearing completion. In the final report, a comprehensive analysis of school and living costs will be presented. Another study initiated during the year is being done in collaboration with the American Dental Hygienists' Association and relates to the problems of the distribution and availability in the labor market of dental hygienists. A third project, completed during the year, provides fundamental information on dental manpower by extending projections of future national needs for dentists from 1955 to 1975.

SPECIAL DENTAL STUDIES

As a result of the growth of medical care and hospitalization insurance programs, there has been increasing interest in similar programs for providing dental care on a prepayment basis. Basic data were collected on time and service requirements for patients; also, on the caries attack rate on dental prepayment, pointing up the effect of water fluoridation on such a program. The Division is planning additional studies in this field in the future.

Nursing Resources

The Division of Nursing Resources analyzes the Nation's nursing needs and takes steps to help meet national requirements for nursing service. In the past few years the Division has conducted research and provided consultation on fundamental studies such as nurse utilization, job satisfaction, and patient care studies.

THE NURSE AND PATIENT NEEDS

A cooperative study was made, with the Commission on Nursing of Cleveland, Ohio, to discover why most hospitals feel their nursing departments are understaffed. Patients, doctors, and nurses were asked to record what they thought was missing in nursing care. The patients felt there was a nursing shortage because of: (1) insufficient explanation of treatments and diagnoses; (2) insufficient thought given to needs of patients and their families; and (3) nurses were

rushed when caring for patients. The results pointed up needs for better utilization of nursing personnel; training to help nurses use time with patients more constructively; and further training of practical nurses and nurses aides. The three hospitals where the first study was made at once began to make the improvements indicated.

STUDY OF NURSING ACTIVITIES

A work-sampling method of analyzing time distribution of nursing activities in general hospitals, originated by the Division in 1953, was used by hospitals in Michigan, Pennsylvania, Louisiana, and elsewhere. In some States, groups of hospitals cooperated in making the studies, through regional institutes or as part of a State survey with the assistance of Division consultants. Hospital administrators and nursing groups then acted to improve staffing of wards and units to permit nurses to spend more time with patients.

New uses were also made of the basic techniques of the work-sampling method of studying nurse utilization. A modification of the method was used in a project at the Northville State Hospital in Michigan to show how better nursing care can be provided for mental patients. In Grand Rapids, Michigan, a private nursing home successfully adapted the method in analyzing its nursing service.

A study of job satisfaction of nursing personnel was initiated during the year. The object is to devise measurements which will correlate the various dimensions of job satisfaction with turnover. If consistent relationships can be established, this will be very important because turnover in hospitals is especially high and costly.

STATES SURVEY NURSING PROBLEMS

Many States continued to conduct State-wide nursing surveys. In at least two States, Pennsylvania and Louisiana, more fundamental studies were conducted, including nurse utilization, job satisfaction, and patient care studies. Two general findings in Pennsylvania were: (1) patients' satisfaction with nursing care was greatest in the hospitals where nurses spent the most time with the patients; and (2) about 75 percent of the professional nurses desire additional education.

Medical Services for Federal Agencies

The Public Health Service has the legal responsibility for providing medical services to certain other Federal agencies. Through the Bureau of Medical Services, medical, dental, psychiatric, and nursing personnel are assigned on a reimbursable basis to those agencies requesting assistance in the operation of medical programs.

OFFICE OF VOCATIONAL REHABILITATION

Since 1943, the Public Health Service has detailed officers to the Office of Vocational Rehabilitation to assist in the administration of the medical rehabilitation aspects of the program. As of June 30, 1955, six officers were on detail—3 medical officers, 1 nurse officer, 1 therapist (physical therapy), and 1 sanitarian (rehabilitation center consultant).

During the year, two workshops on the rehabilitation of the mentally ill were conducted for the States in Region III. The purpose was to explore what is being done for the rehabilitation of mentally ill patients, the gaps in services, and the methods whereby services could be improved, not only in the hospital but in the community after discharge from the hospital.

BUREAU OF EMPLOYEES' COMPENSATION, DEPARTMENT OF LABOR

Medical officers of the Public Health Services are assigned to the Bureau of Employees' Compensation for administrative activities in connection with medical aspects of the Federal Compensation Act, technical advice in the adjudication of claims, and other activities related to the problem of industrial health. Public Health Service facilities were extensively used during the year for treatment of injuries, special examinations, and related services. Other medical facilities of the Federal Government were used where available, and in other areas physicians in private practice were designated to furnish medical care for Federal employees suffering injuries.

A special study of hearing loss cases was continued throughout the year, with major attention to cases developing at a military proving ground. Rehabilitation of injured employees was also given special attention. An analysis of the cases included in a pilot study in the Washington metropolitan area through the U. S. Public Health Service Outpatient Clinic was started during the year and will be continued in 1956.

MARITIME ADMINISTRATION, DEPARTMENT OF COMMERCE

In addition to general administrative duties, the Chief Medical Officer of the Maritime Administration supervised the preparation of clinical abstracts and provided professional counsel to the Office of Seamen's Services.

During the year, a senior surgeon and three dental officers served at the U. S. Merchant Marine Academy, Kings Point, New York. The medical program included administration of the Academy hospital and outpatient clinic, as well as medical care to beneficiaries.

UNITED STATES COAST GUARD, TREASURY DEPARTMENT

On June 30, 1955, there were 82 Public Health Service officers on duty with the Coast Guard. These included 34 medical officers, 37 dental officers, 9 nurses, 1 scientist officer, and 1 sanitary engineer.

Full-time coverage by medical officers was maintained during the year for ocean weather station vessels manning stations BRAVO and COCA. Four full-time medical officers were assigned to the staff of the Commander, Western Area, for the year for duty on ocean weather stations in the Pacific Ocean.

FOREIGN SERVICE, DEPARTMENT OF STATE

During the year a cooperative plan was developed with the military services to send poliomyelitis vaccine to Foreign Service posts for eligible dependents. The Department of State agreed to supply and administer the vaccine for all eligible dependents of employees of the United States Government who are located in countries which do not have military medical facilities.

New health units were established at Addis Ababa, Vientiane and Phnom Pneh. Consideration is being given to establishing health units at Amman, Seoul, and Taipei and to send doctors to Karachi and New Delhi.

Public Law 22, 84th Congress, authorizing pre-employment and in-service examinations for dependents of American Foreign Service personnel was enacted during the year. Plans were made to begin the program in fiscal year 1956.

BUREAU OF PRISONS, DEPARTMENT OF JUSTICE

The completion of the fiscal year marked twenty-five years of medical, dental, psychiatric, and surgical care for Federal prisoners by the Public Health Service. This period has witnessed significant changes in the concepts of penology. Progressively greater emphasis has been placed on efforts to return prisoner charges to society better equipped physically, intellectually, emotionally, and spiritually.

The medical program provides care for over 20,000 inmates of 27 Federal institutions in 22 States. At the end of the fiscal year, 50 medical officers, 17 dental officers, 94 medical technical assistants, 12 nurses, 2 pharmacists, and 28 other personnel were on full-time duty in the Prison Medical Service. Over 200 consultants, representing every medical specialty, continued to provide valuable services to the institutions.

The Medical Center at Springfield, Missouri, continued to receive psychotic patients and patients with chronic medical and surgical

ailments. This hospital averaged 821 patients per day. Patients are transferred from all regular penal institutions, and the population includes all age groups (except the very young) and every type of offender.

Bureau of State Services

Through its Bureau of State Services, the Public Health Service maintains a varied and active partnership with State and Territorial health departments, and with the World Health Organization and its member nations.

Services to States and Territories during fiscal 1955 included the administration of \$95 million in grants to States, and the provision of consultive and technical services. These were provided by staffs in the 9 regional offices, in the Washington office, and in the headquarters and field stations of the three centers of applied research: the Communicable Disease Center, Atlanta, Georgia; the Robert A. Taft Sanitary Engineering Center, Cincinnati, Ohio; and the Arctic Health Research Center, Anchorage, Alaska.

General Health Services

The Division of General Health Services administers the grant-in-aid program to the States, provides public health nursing and public health education services, conducts the Nation's vital statistics program, administers a research program in Arctic health, and does exploratory work in new public health program areas. During the year, the Division also participated in planning and training programs related to the public health aspects of civil defense. A staff was set up in this Division to serve as secretariat to the National Advisory Committee on Poliomyelitis Vaccine and to administer the nationwide vaccine distribution program (see p. 86).

PROGRAM DEVELOPMENT

Among the health program areas explored during the year were: highway accident prevention, medical nutrition services, provision of health services in rural areas—especially extension of health services to agricultural migrants and their families—the role of health personnel in juvenile delinquency programs, needs of homebound handicapped persons, and ways of improving health services for children of school age. As a result of these exploratory activities, it was decided to concentrate, in the immediate future, on efforts to improve rural health—particularly with respect to agricultural migrants—and on health services for school age children.

Studies were continued on the nationwide organization and staffing patterns for full-time local health services. A special study was also made of the training status of public health personnel employed by State and local health departments—and of trends in the support by State health agencies of graduate or specialized training in public health.

Assistance was rendered to the Maryland State Planning Commission in its study of financing local health departments in Maryland. This study resulted in the development of a financial assistance plan which has been accepted by the Maryland State Planning Commission, the State legislature and the Governor as the pattern for developing future financial relationships between the State and county health departments.

STATE GRANTS

Federal appropriations for grants-in-aid for State and local health services, exclusive of those for medical facilities survey, planning, and construction activities, totaled \$21,263,000 for the fiscal year 1955. This represented a decrease of 6.9 percent over the preceding year.

On the other hand, the hospital construction program was expanded to provide Federal grants for construction of four types of medical facilities; i. e., nursing homes, chronic disease hospitals, diagnostic and treatment centers, and rehabilitation centers. A two million dollar appropriation was also made available to assist the States in carrying on survey and planning activities preparatory to the construction of such facilities. By June 30, 1955, 28 States had submitted acceptable applications and were participating in the survey and planning phase of this program.

The following listing shows the amounts and the purposes for which Public Health Service grant-in-aid payments were made:

General Health Services.....	\$9, 724, 462
Venereal Disease Special Projects.....	¹ 706,989
Tuberculosis Control.....	4, 490, 652
Mental Health Activities.....	2, 317, 073
Cancer Control.....	2, 229, 950
Heart Disease Control.....	1, 066, 335
Construction of Community Facilities.....	1, 430, 568
Medical Facilities Survey and Planning.....	154, 571
Hospital Construction.....	73, 004, 260

¹ Includes \$109,043 in services and supplies (including drugs from stock purchased in prior years) furnished in lieu of cash.

Table 4, page 142 shows the distribution of these sums by State.

State appropriations available to State health departments, exclusive of those for the operation of sanatoria and general hospitals, amounted to \$122,689,233, a 5.5 percent increase over the preceding year. Although 43 of the States received some increase in State

appropriations, 8 States received 60 percent of the increase, and there were 9 States which had less funds from State sources for the support of their public health programs than in the preceding year.

NATIONAL OFFICE OF VITAL STATISTICS

The National Office of Vital Statistics (NOVS) is charged with the responsibility for developing a program of national vital and health statistics for use as a factual basis for planning and appraising health programs, social welfare, education, economic enterprises, and the broad purposes of demography.

Cooperative studies were begun four years ago to test the feasibility of incorporating data from State-prepared birth punched cards in national vital statistics. Cards were obtained from 11 areas in 1954 and 17 in 1955. Two States are providing punched cards for deaths. The experiment has proved satisfactory under certain controlled conditions and may point the way to other improvements in the future operations of the vital statistics system.

The Public Health Service and the Association of State and Territorial Health Officers agreed that "compensation to States for microfilming and punching certificates of birth, death, and fetal death for the Public Health Service be equitably linked to the cost incurred. . . ." A special subcommittee, working with the Public Health Service, agreed on the basic elements of cost and secured sample cost data for selected States. On the basis of the cost determined by this sample study, certain average rates of payment were recommended for both microfilming and card-punching.

At its twelfth meeting, the U. S. National Committee on Vital and Health Statistics recommended a broad study of the vital statistics program as a whole, including the types of information that should be collected and the mechanism for collection. Projects now under way include: (1) distribution of a mail questionnaire to a sample of consumers of vital statistics to determine the needs and uses of such statistics; (2) determination of the amount of duplication of effort between State and national offices in the production of vital statistics; (3) estimation of the relative costs of producing national vital statistics by various methods; and (4) ascertainment of State viewpoints on technical assistance and on the program of producing and coordinating vital statistics in general.

Standard items and definitions provide the basis for collecting comparable vital information in all of the reporting areas. During the past 12-month period, steps were taken to revise the Standard Certificates of Live Birth and Death. The revision procedure assures careful evaluation of each item in terms of its current and future usefulness for registration, identification, legal, medical and research purposes.

An International Conference for the Seventh Revision of the International Lists of Diseases and Causes of Death was held in Paris in February 1955. Only minor changes were recommended. The new revision becomes effective January 1, 1958.

The NOVS produces the official life tables for the United States. Essentially, these tables are a mathematical device for summarizing the age-specific mortality rates for the population. They are used extensively for many fields of interest: e. g., population, insurance, public health, medicine, and social security. They are also used widely as comparable measures of longevity for various population groups over specific periods. The most recent tables in the decennial life-table series, which have been published since 1900, were completed in 1954, and are based on population enumerated in the 1950 Census and on mortality data for the 3-year period, 1949-51.

ARCTIC HEALTH RESEARCH CENTER

One of the significant achievements in the Arctic Health Research Center program during the year was the development of the home treatment (chemotherapy) program for tuberculous Eskimos, Indians and Aleuts in central, western and interior Alaska. In the 9 months since the program was initiated (October 1954) X-ray surveys were completed in 20 villages; 3,233 X-ray films were processed and read; and 456 individuals are now participating in the home treatment program.

Results of the first 9 months of the tuberculosis chemotherapy program, which is conducted in cooperation with the Alaska Native Service, and the Alaska Department of Health, are: (1) Treatment of Alaskan natives in their homes with oral chemotherapeutic agents is practical and worthwhile. (2) The Eskimo, Indian and Aleut patients are extremely receptive, cooperative, and willing not only to accept the recommended treatment but also to carry it on faithfully over a period of time. (3) Considerable field work is needed to keep the treatment program operating smoothly, but the interest maintained by the field nurses and the patients has facilitated progress despite the obstacles encountered in launching a new operation of this type.

The redirection and expansion of the environmental sanitation program was another major development during the past year. Heretofore emphasis has been given primarily to consideration of problems of water supplies, sewage and waste disposal in the larger Alaskan communities. Under a cooperative plan with the Alaska Department of Health and the Alaska Native Service, the Center is now concentrating on the improvement of sanitary conditions in small isolated villages.

A third major development at the Center was the beginning of operations in the new Infectious Disease Laboratory. Virus isolation

procedures have been established, and work on poliomyelitis, upper respiratory infections, and "flu-like" diseases is now underway, utilizing specimens submitted to the laboratory by local public health and medical groups and private physicians. Specimens from local cases of non-bacterial enteritis are being studied to determine their etiology.

PUBLIC HEALTH NURSING SERVICES

On June 30, 1955, there were 134 public health nurses in the Public Health Service. Their primary responsibilities include: (1) giving consultation and assistance to State and local health agencies, to other Federal agencies, and to universities on public health nursing service or education; (2) conducting studies on public health nursing practice, and participating in field studies and demonstrations; (3) giving leadership in the development of public health nursing policies and plans through nursing and public health organizations; (4) rendering public health nursing services to medical beneficiaries of the Public Health Service.

Today, every State and Territorial health department has a well qualified group of public health nurses on its professional staff. Twenty years ago, at least 17 State and Territorial health departments lacked nursing units, and less than one-third of those employed were fully qualified public health nursing supervisors.

Some of the problems still facing public health nursing are: (1) developing resources which will increase the supply of public health nurses, especially in rural and suburban areas; (2) furnishing satisfactory field practice in public health to the increasing number of students in collegiate schools of nursing; (3) securing additional training for approximately 60 percent of the nurses now employed in public health who are not fully qualified; (4) developing plans for more adequate clerical and auxiliary help for public health nurses so that their skilled services will be utilized most effectively; and (5) determining the most effective and economical methods for providing nursing service to children of school age.

HEALTH EDUCATION SERVICES

The aim of public health education services is to assist health officials in developing sound educational opportunities in public health practice. This is carried out in two ways: (1) by providing technical assistance to all parts of the Public Health Service, the States, schools of public health, and other educational institutions; and (2) by conducting a program of studies in education and social psychology.

An exploratory study of the ways in which health services by union health centers and industrial health plans can be integrated with the

preventive services provided by health departments was initiated in cooperation with the health department of the City of New York.

The health education staff cooperated with the National Tuberculosis Association and the tuberculosis program of the Public Health Service in a study to identify factors which influence participation in tuberculosis control programs. The analysis of extensive interviews with 1200 randomly selected adults in three cities is now under way. Preliminary findings suggest that a willingness or desire on the part of people to obtain screening X-rays is highly associated with: a concern that they themselves might contract tuberculosis; a real belief that they could have tuberculosis for an extended period of time without being aware of it; and a real belief that the problems and worries they anticipate, should they contract the disease, would be greatly reduced if the disease were detected at an early stage.

The staff is cooperating with the Division of Nursing Resources in the study of methods for use by administrators in assessing job satisfaction of nursing personnel as related to turnover and in identifying means of improvement. During the year, pilot investigations were carried out in two hospitals in Washington, D. C., and three hospitals in Syracuse, New York. In cooperation with the heart program, a new study was initiated to identify the social and psychological aspects associated with coronary disease and rehabilitation following a coronary attack.

Special Health Services

The Division of Special Health Services assists States in putting to work as speedily as possible the results of research in disease control and health conservation. The services to State include grants, assignment of skilled personnel upon request, consultation, and evaluation and analysis of field study data. The Division administers five health program activities; Chronic Disease, Heart Disease, Occupational Health, Venereal Disease, and Tuberculosis. During the year a new program activity, the Community Air Pollution Medical Program, was established in the Office of the Chief.

CHRONIC DISEASE PROGRAM

In the study of abnormal carbohydrate metabolism in pregnancy begun in April 1954, 3,430 women were screened for possible abnormal glucose tolerance on the basis of blood sugar level one hour after drinking a glucose preparation. Women with a history of previous abnormal pregnancies or a family history of diabetes were also selected. Approximately 1,200 women (35.3 percent) screened positive to at least one screening criterion. Of these, 58 were considered

to have abnormal carbohydrate metabolism and were selected for study of the effectiveness of insulin treatment. Selection of women for followup is expected to continue for another 4 years, and followup of those selected will go on for at least 15 years.

The diabetes test validation study continued. Preliminary findings indicate that different screening levels for various hours after eating can be established to maximize sensitivity and specificity. Blood sugar screening tests appear both more sensitive and more specific than urine tests, an observation of considerable value in diabetes detection programs.

Protocols and forms were prepared for the study of diabetes case-finding among parents of large babies. A pilot study is under way in Oxford, Massachusetts, where hospital birth records since 1935 were checked. Of 1,416 babies, 292 weighed 8 or more pounds, and 96 weighed 9 or more pounds. Activity is continuing to attempt to locate the parents and examine them to determine their prevalence of diabetes by weight groups of offspring.

Preliminary investigations of screening techniques and studies were made in glaucoma, obesity, and nephritis. Preliminary exploration was also undertaken with regard to studies of methods of patient education in the hospital and public education in the community.

Orientation courses in diabetes control were given to 60 health workers: 8 physicians, 29 nurses, 18 nutritionists, 1 social worker, 2 health educators, 1 laboratory technician, and 1 statistician.

HEART DISEASE CONTROL PROGRAM

During the year progress was made in both operational research and professional service activities. Consultation to States, in cooperation with regional consultants, was continued in specific aspects of heart disease control programs.

One research study revealed that chest X-rays compare favorably with other screening devices for heart disease, when reading criteria are properly selected. Retrospective studies in Los Angeles and Dallas were carried on to determine the beneficial effects to individuals with cardiovascular disease of casefinding by X-ray. Film reading was completed and plans were made for refereeing disagreements for followup to determine subsequent mortality experience.

Initial steps were taken for the establishment of a Training Center in Cardiovascular Disease for Nurses at the University of Minnesota.

OCCUPATIONAL HEALTH PROGRAM

Operational research activities included completion of the field epidemiologic survey of the diatomaceous earth industry and preparation of a draft report. The long-term study of the effect of indus-

trial noise on hearing loss was continued in cooperation with four Federal penitentiaries. Efforts to develop satisfactory ventilation systems for small-scale uranium mines were continued. Tentative agreement was reached on an acceptable long-term exposure level for radon and its decay products. Laboratory investigations were completed on the possible dermatologic effects of waterless handcleaners and silicone protective creams.

Employee health conservation studies completed during the year included development of methods whereby employers can estimate the costs due to sickness and injury of their workers, and the costs of providing employee health services. Design of a survey to determine the attitudes and understanding of management concerning employee health services was completed and an extensive survey is scheduled in five cities and four industries for fiscal year 1956.

Program services included comprehensive occupational health surveys conducted in the States of Florida, Washington, Kentucky, and South Dakota, and detailed environmental surveys of working conditions made for the Library of Congress, the U. S. Government Printing Office, and the Bureau of Mines oilshale demonstration plant at Rifle, Colorado. The industrial nursing consultative services of the occupational program were reactivated during the year.

TUBERCULOSIS CONTROL PROGRAM

During the year, emphasis in tuberculosis control was placed on projects designed to answer urgent epidemiological questions, to evaluate tuberculosis control practices, and to assist in the improvement of services.

Recent developments in tuberculosis therapy have placed increased responsibilities upon State and local health departments in the provision of services for case supervision and treatment. To obtain information regarding characteristics of patients and the care and services provided them, the tuberculosis staff conducted a nationwide study of the current status of nonhospitalized tuberculosis patients.

An experimental study of the use of isoniazid in the prevention of tuberculosis shows that in guinea pigs tuberculosis can be prevented by giving the drug at the time of infection. When isoniazid is withdrawn, protection is provided against a second infection.

To determine whether isoniazid will prevent the development of tuberculosis meningitis and other complications in children, the staff is carrying on a national study in which more than a thousand children with recently diagnosed primary tuberculosis are participating.

A cooperative clinical investigation on the antimicrobial treatment of tuberculosis has demonstrated the effect of chemotherapy in preventing relapses, the value of changing chemotherapy for patients

who have failed on other drug regimens, and the incidence of reactivation of disease after chemotherapy is discontinued.

Detailed studies of the toxic effects of pyrazinamide were undertaken in an attempt to establish, in 687 patients, an informational basis on which the risk of toxic hepatitis can be weighed against the striking therapeutic effectiveness of pyrazinamide and isoniazid already reported by some investigators.

An investigation of changes in tuberculosis bed utilization between April and November 1954 has shown: (1) that the number of tuberculosis beds occupied decreased between 6 and 7 percent in that eight month period; (2) about one-fourth of all non-Federal tuberculosis hospitals showed increases in the number of patients hospitalized; and (3) half the hospitals showing decreases closed less than ten beds per hospital.

A team of public health consultants evaluated the tuberculosis control programs of Maricopa and Pima Counties, Arizona. Staff members also investigated the effect of nonresidence restrictions, the availability of medical social services, the possibility of changes in the social factors that result from new treatment methods, and the health status of agricultural migrant workers.

VENEREAL DISEASE CONTROL PROGRAM

There were 375,000 cases of venereal disease reported during the year, more than the total of all other adult notifiable communicable diseases combined. Although the total number of early syphilis cases decreased slightly, increases in primary and secondary syphilis occurred in 17 States, increases in early latent syphilis occurred in 11 States, and increases in gonorrhea occurred in 26 States. The total number of cases of gonorrhea for the Nation as a whole increased over the previous year for the first time since 1947.

Major venereal disease control problems encountered during the year were: (1) occurrence of sizable epidemics in widely separated areas, many of them not served by adequate control facilities; (2) transmission of venereal disease throughout large areas of the United States by migrant laborers from areas of high prevalence within and without the United States; and (3) dissemination of venereal disease among teen-age and youthful adult groups who now comprise more than half of the infectious venereal disease caseload.

The Venereal Disease Program cooperated and assisted in case-finding projects in 34 States, the District of Columbia, Alaska, Virgin Islands, and Puerto Rico.

Consultative laboratory services to States continued to be supplied through the Venereal Disease Research Laboratory, Chamblee, Georgia. By supplying control serum and reagents to State laboratories

for check testing, the quality of the specific tests for syphilis was maintained.

The need for a more specific serologic test for syphilis simple enough to be done in the average serologic laboratory has been recognized for years. The newly described TPCF test, developed at the Venereal Disease Experimental Laboratory, Chapel Hill, North Carolina, seems to meet this need. Chemical fractionation of pathogenic *T. pallidum* has produced a protein-like antigen which, when used in usual complement fixation tests, appears to be specific for treponemal infections. The results are highly reproducible and easily read.

In training schools located at Norfolk, Atlanta, and Los Angeles, 400 health department and military personnel were given intensive training in interviewing techniques. Postgraduate courses for physicians conducted in cooperation with medical schools in Los Angeles and in New Orleans provided nearly 150 general practitioners and military physicians up-to-date information on recent advances in diagnosis, treatment, and control techniques.

Unique in this field, a "Stereoscopic Manual of Venereal Disease," including 98 three-dimensional color slides illustrating characteristic lesions of syphilis and other venereal diseases was produced. It was prepared by the staff for medical students and practitioners interested in reorienting themselves in the diagnosis of venereal disease.

Sanitary Engineering Services

The Division of Sanitary Engineering Services continued its programs of research and technical assistance in the field of environmental health.

HOUSING AND HOME ACCIDENT PREVENTION

The Conference of Municipal Public Health Engineers reported that 58 cities are currently engaged in housing rehabilitation programs and that 28 additional cities are actively planning such programs. Forty-eight percent of the 58 cities actively engaged in housing rehabilitation have assigned the primary responsibility for enforcement and program direction to the health department. In 17 percent of the cities, the health department jointly shares this responsibility with the building and fire departments, and in the remaining 35 percent this responsibility is assigned to other municipal departments.

An analysis of the municipalities that are engaged in housing rehabilitation activities indicates that housing ordinances which prescribe minimum standards of health, sanitation, and safety are being

adopted more rapidly in larger communities than they are in smaller communities and rural areas.

The study to determine the change in quality of housing "before" and "after" rehabilitation, conducted jointly by the Baltimore City Health Department and the Public Health Service, was completed. The findings indicated that rehabilitation programs resulted in significant improvement of the quality of housing.

The three local and eight statewide home-accident-prevention programs sponsored by grants from the W. K. Kellogg Foundation progressed satisfactorily during the year. In addition to these demonstration programs, new interest in home-accident prevention has been shown in at least 12 other States. This interest has ranged from special studies of the size and characteristics of the home-accident problem to the assignment of personnel directed to develop accident-prevention activities.

INTERSTATE CARRIER SANITATION

During the year, the first list of equipment acceptable for use on interstate carriers was completed and distributed.

Regional sanitary engineering personnel continued to review plans and inspect the sanitary construction or reconstruction of railroad passenger cars, vessels, aircraft, and buses. During the year, construction or reconstruction of 510 railroad conveyances, 55 vessels, 38 aircraft, and 355 buses was completed; and 358 Certificates of Sanitary Construction were issued for these conveyances.

Regional office personnel conducted sanitation inspections of 1,890 dining cars and 1,360 vessels in operation during the year. On these inspections, 590 of the diners and 497 of the vessels rated 95 or more.

During the year, inspections were conducted of 782 sources of milk and milk products, 437 frozen dessert sources, 195 railroad and vessel commissaries, 410 airline catering points and 20 other food sources. In addition, inspections were made of 902 water supplies, 1,069 railroad and watering points, 1,020 vessel watering points, 212 airline watering points, 11 bus watering points and 11 sources of bottled water.

GENERAL ENGINEERING ACTIVITIES

Division personnel continued to provide consultation service to the National Park Service and other Federal agencies. During the year a special study of refuse sanitation problems in the National Parks was completed. In two of the Parks a study was initiated to determine the feasibility of employing molecular filter field kits to assist in the evaluation of isolated water supplies. For the National Park Service, the regional offices performed 48 sanitary surveys, reviewed 35 sets of

construction plans, operated 4 food-service schools, and conducted 16 special investigations.

Construction was completed on 7 community facilities projects and 18 final audits were made. Nine active projects of the total of 33 sanitary engineering projects remained at the end of the year. Five of these continued under construction and the other 4 were in various stages preliminary to determination of final grant payments. Twenty-four projects have been completed to date, at a cost of almost \$3.5 million.

MILK AND FOOD SANITATION

The most significant accomplishment in the area of standards development during the year was the publication of a model poultry ordinance for the guidance of State and local health officials. Most poultry and poultry products are sold in the States in which they are processed and are subject only to State and local sanitary control.

The studies on the thermal resistance of *Coxiella burnetii* which have been in progress at the University of California under a cooperative arrangement with the Public Health Service, were completed. Preliminary analysis of the data indicates that it will be necessary to raise the temperature of pasteurization by 30-minute holding from 143° F. to 145° F. to assure the inactivation of this organism. However, this study did not indicate that a change would be necessary in the 161° F. for 15 seconds specification for HTST pasteurization.

A study of the Sanitary Engineering Center on the bactericidal efficiency of quaternary ammonium compounds in different waters was completed. It was established that bicarbonates, sulfates and chlorides of calcium, and magnesium were the primary causes for interference with the bactericidal efficiency of these compounds as previously reported. It was also determined that the addition of suitable conditioning agents to quaternary ammonium compound formulations would substantially eliminate this difficulty. Formulations can now be produced which will be effective in waters up to 500 ppm of hardness. Consequently, compatibility tests with individual water supplies in this range of hardness are no longer necessary.

At the Sanitary Engineering Center, work on methods for more rapid detection of food poisoning organisms has resulted in the development of techniques which materially reduce the incubation time required for the isolation of staphylococci, enterococci, salmonella and coliforms. Presumptive identification of these organisms by this technique can now be made in four to five hours.

The cooperative Federal-State program for the certification of interstate milk shippers provides a means for expediting the flow of milk between interstate markets. Over 1,400 copies of the list,

"Sanitation Compliance Ratings of Interstate Milk Shippers," are distributed quarterly to State and local milk control agencies and the dairy industry. The last list provided information on 483 shippers located in 32 States and the District of Columbia. Regional milk consultants standardized the work of 27 State milk sanitation rating officers and conducted 30 check ratings of interstate milk supplies. Considerable progress was made in the certification of laboratories involved in the control of interstate milk.

Approximately 1,400 shellfish shippers are certified by the 22 participating States to the Public Health Service for interstate shellfish shipment. Over 1,300 copies of the list of certified shellfish shippers are sent to local health organizations and other interested persons.

A National Conference on Shellfish Sanitation was held in Washington in September. The conference, the first of its kind since 1925, was attended by about 100 persons representing the Federal and State governments and the shellfish industry. It was the consensus that the joint cooperative shellfish certification program has been successful, and the Conference recommended certain technical improvements in the endorsement and certification procedure.

During the year the Governments of Australia, the Netherlands, Iceland, and Japan indicated interest in obtaining an extension of the domestic shellfish certification program to cover shellfish exported to the United States. Staff personnel participated in several conferences with the Food and Drug Administration, the Division of International Health, and embassy officials of the interested countries to discuss the problem.

At the close of the year, the Milk Ordinance had been formally adopted by 1,594 municipalities, 420 counties, 34 States and 2 Territories, with a total population of approximately 60 million people. The Ordinance and Code Regulating Eating and Drinking Establishments had been adopted by 691 municipalities, 357 counties, 30 States, the District of Columbia, and one Territory. About 83 million people are now covered by this ordinance.

RADIOLOGICAL HEALTH

During the year, the Atomic Energy Commission received applications for licenses for the construction of nine reactors and two fuel element fabrication plants. The Public Health Service assisted the Commission in developing the health and safety aspects of licensing regulations.

At the end of the year, two States had laws or regulations dealing with all types of radiation exposure, nineteen had laws or regulations concerned with a specific type of exposure, two had advisory standards

only, and four were considering the adoption of a general law or regulation. Eleven States or Territories had comprehensive programs dealing with the control of radiation hazards, while 36 States had more limited programs.

The sampling and assay of atmospheric dust collected from 23 stations in the United States and Alaska is continuing. Radioactive dust over and above the background level has been observed at most of the sampling stations, but some stations indicate greater frequency and magnitude of contamination.

WATER SUPPLY AND WATER POLLUTION CONTROL

The following studies on water treatment were initiated: (a) a survey of the efficiency of water treatment plants in removing or destroying coliform organisms, and in removing chemical waste components in raw water; (b) determination of water purification needs for isolated householders. Taste and odor problems were defined through: (1) improved methods for collecting, concentrating and analyzing chemical waste components; (2) study of the life cycles of nuisance algae grown in pure cultures, and development of a procedure for evaluating specific algacides. The resistance of water-suspended viruses to chlorination and the significance of fungi in the water environment were further investigated. Methods for the rapid identification of bacteria by the infrared spectrophotometric procedure were improved and a catalogue based on absorption spectra and related data was established.

In water pollution control, improved methods were developed for collecting and identifying trace concentrations of complex organic chemicals, including synthetic detergents, insecticides, and waste from petrochemical and chemical processing plants. Studies on the persistence and biological destruction of oils in surface waters were completed. Procedures for measurement of anionic detergents and certain significant radioactive waste products, including strontium 90, were developed. The automatic dissolved oxygen analyzer was brought to the point of engineering development. Research was completed on the development of an effective process for separating and concentrating oil in emulsified suspension in waste. A study was initiated on the physical, chemical, and biological principles associated with the successful operation of sewage lagoons. The toxic effects of specific insecticides, algacides and metallic salts on fish, and their dissolved oxygen needs under various feeding and activity conditions were identified.

Comprehensive water pollution control programs for river basins encompassing about half the area of the Nation are substantially completed, providing the basis for local pollution abatement programs.

The continuing inventories of sewage and industrial waste treatment facilities, maintained as an aid in keeping comprehensive abatement programs up to date, were completed and published for 28 States.

In June 1954, the Surgeon General issued formal findings of interstate pollution of the Cornie Creek Drainage Basin in Louisiana, caused by oil brine wastes originating in Arkansas. Corrective action by operators of 42 of the 71 leases under observation has achieved substantially complete pollution abatement; adequacy of the corrective measures installed at 17 leases is being observed; 4 leases have ceased operations; and 8 have not reported any corrective action. Second notices have been sent to 9 lease operators involving 34 leases.

Data on sewage treatment plant construction indicated that, during calendar year 1954, cities contracted for 716 sewage treatment plant projects at a cost of \$228 million. This represents, after adjustment for cost fluctuation, a 21 percent increase over 1953 construction. The contracts covered 366 new plants and 350 additions or improvements to existing plants.

TRAINING ACTIVITIES

Forty-three formal field training courses were held during the year. There were three courses in milk and food sanitation, 16 in radiological health, and 41 in water supply and water pollution control. Seventeen of the courses were conducted at the Sanitary Engineering Center and 43 in the States.

The chemical analytical reference service, inaugurated by the Center in March 1954, has met with considerable response from State laboratories. The program permits interested States to make a performance evaluation of chemical analytical procedures in their sanitation laboratories. A water sample containing known amounts of various elements commonly found in water supplies is prepared at the Center. Participating laboratories receive portions of this sample for analysis. So far, 26 different laboratories have participated in this program.

COMMUNITY AIR POLLUTION

An Ad Hoc Interdepartmental Committee on Air Pollution was established at the invitation of the Secretary of the Department of Health, Education, and Welfare. The Committee report, released in April 1955, recommended increased research and technical services in community air pollution.

Toward the close of the fiscal year, the Congress enacted Public Law 159, authorizing the Public Health Service to provide research and technical assistance relating to air pollution. This law was signed by the President on July 14, 1955.

The National Air Sampling Network initiated during the year included 70 stations throughout the United States by the year's end. Samples, taken at least once a week from each station, were analyzed at the Sanitary Engineering Center in Cincinnati.

Communicable Disease Center

The Communicable Disease Center serves as the combat arm of the Public Health Service in the fight against infectious diseases. Utilizing a corps of scientific and technical specialists in many disciplines, the Center adapts basic research knowledge to practical disease control methods. To this end it conducts investigations, provides operational guidance, maintains surveillance to detect potential outbreaks of communicable diseases, provides assistance in epidemics and natural disasters, and assists in the training of public health personnel.

SURVEILLANCE OF DISEASES

The National Surveillance Program of the Center functions to detect reintroduction or resurgence of diseases now absent or considered under control in the United States. Range of coverage includes smallpox, leprosy, diphtheria, psittacosis, malaria, and murine typhus fever.

The incidence of malaria declined from 1,310 cases reported in 1953 to 705 cases in 1954. The majority of these infections were acquired in Korea. Seven primary indigenous cases were included, one apparently due to a blood transfusion. Twenty-one cases of suspected smallpox were investigated and all were found negative.

REPRESENTATIVE DISEASE STUDIES

Viral Hepatitis: With the increased morbidity from viral hepatitis, new approaches toward developing a test for early diagnosis were initiated.

Encephalitis: A major epidemic of St. Louis encephalitis (SLE), involving upwards of 1,000 human cases with several deaths, occurred in the lower Rio Grande Valley area of Texas. The CDC assisted in investigation and control by performing epidemiologic, technologic, and laboratory services.

Rabies: Differences in rabies viruses isolated from various parts of the country were demonstrated in the incubation periods of certain strains, in the degree of Negri body formation observed, and in the course of the infection produced in bats.

Psittacosis: During the year, consultation on psittacosis was given on 42 occasions; and diagnostic reagents for serologic tests and training in techniques of serological diagnosis were provided.

Diarrheal Diseases (Bacillary): Studies on identification of enteric bacteria continued. Fourteen new *Salmonella* serotypes were isolated and characterized, and 81 were confirmed for national and international health centers.

Leptospirosis: A method to control anticomplementary activity of leptospiral antigens was developed and more efficient culture techniques were devised for diagnostic use.

Diphtheria: The higher rate of diphtheria morbidity in the southeastern part of the country stimulated studies to determine the underlying factors for this deviation.

Plague: Continuing investigations included studies to learn the comparative susceptibility of wild and domestic rodents, to determine factors governing epizootic and enzootic plague among wild rodents, and to devise methods for field control of the vectors.

Murine Typhus Fever: Incidence of murine typhus fever declined slightly this year. A study on feasibility of attempts to eradicate the disease, conducted in a 100-square-mile area of Georgia, yielded excellent rodent control results.

Leprosy: In the past the leprosy bacillus, *Mycobacterium leprae*, has defied all efforts at cultivation. Experimentation based on the HeLa cell system of tissue culture was initiated at the Center in an attempt to culture the organism *in vivo*. There were 29 new, confirmed cases of leprosy in this country last year.

Histoplasmosis: Clinical studies were initiated to discover an effective treatment for histoplasmosis. Evidence suggests that in histoplasmosis, which often is misdiagnosed as tuberculosis, the therapy prescribed for the latter may actually be harmful.

Ringworm: Studies of the role of domestic and wild animals as natural sources of human pathogenic fungi resulted in the isolation of four dermatophytes from 25 percent of the 800 animal specimens cultured.

Amebiasis: Control measures instigated by CDC and cooperating health agencies reduced the incidence of amebiasis among employees of a wood-working plant from 52.4 percent to 1.1 percent in one year. After the plant's private water supply was found to be contaminated, city water was installed and mass therapy was instituted.

Toxoplasmosis: By means of a newly developed diagnostic procedure, sera can be tested for toxoplasmosis antibodies by noting the degree to which fluorescent staining of parasites is inhibited in dried smears.

Schistosomiasis: Cooperative studies with the Commonwealth of Puerto Rico Department of Health were continued on methods for detecting foci of schistosomiasis and for controlling the disease.

Trichinosis: Early detection of *Trichinella* infections in human beings may be facilitated by the flocculation technique for serologic

diagnosis developed at the Center. The effectiveness and practicality of this method on swine in abattoirs is being investigated.

EPIDEMIC AND DISASTER AID

In answer to requests, CDC epidemiologic aid, supported by laboratory diagnostic services, was provided to 15 States and 2 foreign countries in 18 epidemic situations. In addition, Epidemic Intelligence Service Officers investigated approximately 170 other outbreaks of some 40 communicable diseases that did not reach epidemic proportions. Infectious hepatitis led the list of disease outbreaks (as it did last year), followed by gastro-enteritis and the diarrheal diseases, typhoid fever, poliomyelitis, encephalitis, and psittacosis.

STUDIES ON INSECTICIDES

Current research on insecticide resistance is of two kinds: (1) fundamental studies relating to the basic physiologic and biochemical aspects of resistance; and (2) investigations to develop and evaluate improved methods and materials for the control of resistant species.

A new organic phosphorus compound, known as DDVP and identified as dimethyl 2,2-dichlorovinyl phosphate, is being tested in CDC laboratories and in the field. It shows great promise for control of flies and certain agricultural insect pests, yet its level of toxicity for higher animals is comparatively low.

Investigations on health hazards associated with the use of economic poisons continued. Volunteers were given the chlorinated hydrocarbon compound, DDT, at dosage levels up to 200 times the calculated normal intake from residues on food without demonstrable deleterious effect. Similar investigations of the organic phosphorous compound, demeton, likewise demonstrated no adverse effect.

VECTOR CONTROL IN WATER RESOURCES DEVELOPMENT

In work on problems associated with water resources development, emphasis was given to studies on the arthropod-borne encephalitides, the bionomics of the mosquito vectors and other irrigation-area mosquitoes, and means to prevent or control their breeding. In most instances findings indicated that mosquito production could be prevented or minimized by proper use of irrigation waste water and surface run-off, supplemented, when necessary, by chemical control. Field tests were made of various insecticides, including dieldrin, DDT, and heptachlor, to determine their effectiveness as preflood larvicides for the control of mosquitoes.

REFUSE DISPOSAL

Studies on composting of refuse as a practical and sanitary method of preventing vector breeding, with concurrent production of a valu-

able byproduct, have continued. In field trials on nonmechanical methods, need for expensive "turning" was eliminated by placing the compost materials on aeration frames, with high-grade composts being produced in 4 to 7 weeks.

DIAGNOSTIC REAGENTS

Certain diagnostic materials, including antigens and antisera, that were unavailable elsewhere, were produced at the Center. State laboratories thus were able to obtain enteric grouping sera, and other types of reagents when supplies were adequate. Streptococcal antisera were produced for the Department of Defense.

TRAINING

Increasing emphasis was placed on developing a broader communicable disease control training program for all categories of public health workers. A total of 176 courses were attended by 3,747 public health workers, including physicians, nurses, veterinarians, sanitarians, and vector control specialists. Slightly more than half of these courses were presented in the States, or at the seven CDC field training stations.

CONSULTATION AND DEMONSTRATIONS

Demonstration projects were conducted at Kansas City, Kansas, Pueblo, Colorado, and Laredo, Texas, to improve vector control practices by initiating efficient refuse storage, collection, and disposal practices; extending sewer systems to permit elimination of insanitary privies; developing satisfactory methods of industrial waste disposal; eliminating animal shelters or controlling fly breeding within them; and encouraging revision of existing municipal ordinances or adoption of new regulations relating to improved environmental sanitation.

Upon request, special laboratory assistance was rendered to 22 States. Program reviews were made of 4 State health laboratories. Nearly 2,000 items of instructional material including stock cultures, slide mounts, and literature were distributed to public health laboratories in 47 States, 4 Territories, and 41 foreign countries. Over 40,000 specimens were submitted to the Center for reference diagnosis, either for confirmation or because they presented diagnostic difficulties.

Dental Public Health

During the year, the Division of Dental Public Health continued to work toward the development and application of new knowledge to improve the Nation's dental health through: (1) developmental research studies; (2) provision of consultation, technical assistance, and professional guidance to State and local health departments.

DEVELOPMENTAL STUDIES

Ten years of fluoridation of the Grand Rapids, Michigan, water supply has demonstrated the effectiveness, safety, and practicability of this public health measure for reducing dental caries. During the year, 1,085 communities, with an aggregate population of almost 21 million, were fluoridating their water supplies. Topical fluoride programs were also developed in many State and local health departments.

Studies of the dental needs of children living in fluoride areas—underway in Cambridge, Maryland, and Gainesville, Florida—will provide age-specific data on children's dental needs, both initially and on a maintenance basis. These studies will also provide opportunity for developing and refining dental public health techniques.

Studies designed to develop realistic indices for measuring the incidence and prevalence of periodontal disease, specifically gingivitis, are continuing. The development of such an index will make possible a better understanding of the characteristics of gingivitis.

Laboratory studies to develop new and improved methods of fluoride analysis, feeding and handling compounds, and of defluoridation methods are being carried out. Projects to test defluoridation procedures developed in the laboratory are continuing in two communities in an effort to develop effective and less expensive means for removing excess fluorides from water supplies.

PROGRAM SERVICES

Consultation and technical services were provided to 20 States on specific dental health projects. These projects were designed to provide new scientific knowledge, to study a particular problem area, or to evaluate local dental health programs.

Division personnel conducted short courses in fluoride analysis for water works operators.

Assistance was provided to four schools of dental hygiene in developing curriculum, and to six State and local health departments in utilizing dental hygienists effectively. Auxiliary personnel, particularly dental hygienists, can be used to extend professional skills and services to a larger number of people.

Another new area of activity centered on the problems associated with the dental needs of the chronically ill. Pilot surveys were begun of the dental needs of the chronically ill patients in two State hospitals.

Division of International Health

The Public Health Service continued to maintain active relationships with the World Health Organization, the Pan American Sanitary Organization, and the agencies of the United States Government

operating health programs abroad. This work is focused in the Division of International Health.

Two significant measures related to international health were effected during the year. One was the removal of the limitation upon the United States contribution to the World Health Organization. The other was the termination of the Foreign Operations Administration as an independent agency, effective July 1, 1955, and the establishment of the International Cooperation Administration within the Department of State.

INTERNATIONAL HEALTH REPRESENTATION

The relationship of the Public Health Service to the World Health Organization and the Pan American Sanitary Organization is maintained through the Department of State in regard to all policy matters and directly with the organizations on all technical matters. Officers of the Service served on official delegations to the XV Pan American Sanitary Conference in Santiago, Chile, the Eighth World Health Assembly in Mexico City and on many WHO expert committees. The Division continued to perform a major role in the preparation for U. S. representation at international health meetings.

In addition members of the Division staff attended and participated in a wide range of meetings on international health matters. In cooperation with the National Citizens Committee for the World Health Organization, the Division arranged for a seminar program on technical subjects for the delegates returning through the United States from the World Health Assembly in Mexico City.

Under operating agreements between the International Cooperation Administration and the Public Health Service, the Division continued to recruit personnel for overseas missions; train professional and technical personnel from foreign countries; provide consultation to the public health personnel connected with FOA programs; and obtain or prepare technical materials for use in the overseas health programs.

At the close of the fiscal year, health programs were receiving ICA assistance in 42 countries, using a total of 400 professional and technical personnel. Of this number, 164 were commissioned officers of the Public Health Service.

A major activity of the Division is the supervision of training programs of foreign health personnel in this country for study or observation. During the year, 771 persons from 68 countries were assisted in 111 fields of study. Major fields were public health administration, health education, clinical or laboratory work, nursing, and sanitation. Participants were placed in 39 schools, 26 clinical centers, and 13 inservice training organizations.

Participants in the program came from:

Western Hemisphere.....	203 participants from 22 countries
Europe.....	73 participants from 15 countries
Middle East.....	110 participants from 8 countries
Africa.....	17 participants from 7 countries
Far East and Southeast Asia.....	368 participants from 16 countries

The Division staff assisted in the preparation for and participated in two conferences of health personnel in U. S. overseas missions, WHO regional representatives, and personnel from the Washington offices of ICA and PHS. One was a regional conference held in Panama during July for health workers serving in Latin America; the other a bi-regional conference in New Delhi, India, during February-March for representatives from Near Eastern, South Asian and Pacific areas.

Other services in support of health programs of overseas missions included: development of manuals for technical guidance of the missions on health programs; preparation or procurement of technical information requested by overseas health personnel; development of more suitable standards for insecticides and spray equipment for malaria control; visits by staff members to missions; and assistance in providing information and materials for the use of special consultants to the missions.

Table 1.—Statement of appropriations, authorizations, obligations, and balances for fiscal year 1955

[In thousands]

Appropriations	Funds available for obligation				Total funds available	Amounts obligated	Balances
	Appropriations and authorizations	Net transfers between appropriations	Repayments for services	Prior year unobligated balances			
Total.....	\$251,328	\$833	\$17,357	\$29,193	\$306,340	\$238,557	\$67,423
Appropriations, Public Health Service.....	251,328	833	17,357	29,193	298,711	232,343	66,370
Control of tuberculosis.....	6,000	9	-----	-----	6,009	6,005	4
Control of venereal diseases.....	3,000	38	-----	-----	3,038	3,030	8
Assistance to States, general.....	13,000	55	140	-----	13,195	13,179	16
Control of communicable diseases.....	4,300	69	261	-----	4,630	4,615	15
Disease and sanitation investigations and control, Alaska.....	1,125	5	55	-----	1,185	1,159	26
Engineering, sanitation, and industrial hygiene.....	3,565	60	98	-----	3,723	3,699	24
Foreign quarantine service.....	2,900	50	-----	-----	2,950	2,931	19
Hospitals and medical care.....	33,000	420	3,326	-----	36,746	36,686	60
Salaries and expenses, hospital construction services.....	1,100	2	-----	-----	1,102	1,090	12
Indian health activities.....	-----	100	-----	-----	100	95	5
Working capital fund, narcotic hospitals.....	-----	-----	509	18	527	427	100
Grants for hospital construction.....	96,000	-----	-----	25,329	121,329	59,953	61,376
Surveys and planning for hospital construction.....	2,000	-----	-----	-----	2,000	173	1,827
Patients' benefit fund, Public Health Service.....	19	-----	-----	13	32	17	15
Operating expenses, National Institutes of Health.....	4,675	-----	10,349	-----	15,024	14,612	412

See footnotes at end of table.

Table 1.—Statement of appropriations authorizations, obligations, and balances for fiscal year 1955—Continued

[In thousands]

Appropriations	Funds available for obligation				Total funds available	Amounts obligated	Balances
	Appropriations and authorizations	Net transfers between appropriations	Repayments for services	Prior year unobligated balances			
Salaries, expenses, and grants, National Cancer Institute.....	21,737	-14			21,723	21,691	32
Mental health activities.....	14,147		19		14,166	14,055	111
Salaries, expenses, and grants, National Heart Institute.....	16,668				16,668	16,595	73
Dental health activities.....	1,990	11			2,001	1,994	7
Arthritis and metabolic disease activities.....	8,270	38			8,308	8,292	16
Microbiology activities.....	6,180	42	10		6,232	6,218	14
Neurology and blindness activities.....	7,600				7,600	7,537	63
Gorgas Memorial Laboratory.....	131				131	131	
Construction of research facilities.....				3,061	3,061	1,644	1,417
Retired pay of commissioned officers (Annual).....	1,141	-100			1,041	989	52
Retired pay of commissioned officers (no year).....				181	181	175	6
Salaries and expenses.....	2,780	48	170		2,998	2,939	59
Service and supply fund.....			2,420	591	3,011	2,410	1,601
Appropriations, special project funds made available by other agencies.....					7,269	6,216	1,053
Salaries and expenses, Bureau of Prisons (allocated working fund to HEW, PHS).....					1,277	1,287	² -10
American Sections, International Commissions, State (allocated working fund to HEW, PHS).....					50	49	1
Refugee Relief, Executive (transfers to HEW, PHS).....					374	369	5
Operations, Federal Civil Defense Administration (allocated working fund to HEW, PHS).....					83	82	1
Atomic Energy Commission (allocated working fund to HEW, PHS).....					189	163	¹ 26
Research and development, Navy (allocated working fund to HEW, PHS).....					110	72	¹ 38
Research and development, Army (allocated working fund to HEW, PHS).....					540	376	¹ 164
Maintenance and operations, Air Force (allocated working fund to HEW, PHS).....					30	22	8
Research and development, Air Force (allocated working fund to HEW, PHS).....					54	40	¹ 14
Farm labor supply revolving fund, Bureau of Employment Security.....					251	238	¹ 13
Naval working fund (allocated working fund to HEW, PHS).....					36	32	¹ 4
Technical Assistance to American Republics and Non-Self Governing Territories of the Western Hemisphere, Executive (transfers to HEW).....					299	152	¹ 147
Southeast Asia and the Western Pacific, Executive (Transfer to HEW).....					160	148	12
Defense support, Europe, Executive.....					14	8	6
Administrative expenses, Mutual Security Agency Act, Executive (transferred to HEW).....					107	105	2
Technical cooperation, general, Executive (transfers to HEW) (no year).....					602	406	¹ 196
Technical cooperation, general, Executive (Transfers to HEW) (annual).....					2,471	2,083	388
Defense Support, Near East, Africa, and South Asia, Executive (transfers to HEW).....					8	8	
Civil defense activities, Office of the Secretary.....					614	576	38

¹ Available for obligation in subsequent years.² \$61,204 available for obligation in subsequent years.³ Funds transferred after June 30, 1955.

Table 2.—Research grants and awards, fiscal year 1955

Program	Research grants		Research fellowships				Teaching grants		Training grants		Traineeships		Cancer field investigation grant		Total	
	Num-ber	Amount	Full-time		Part-time		Num-ber	Amount	Num-ber	Amount	Num-ber	Amount	Num-ber	Amount	Num-ber	Amount
			Num-ber	Amount	Num-ber	Amount										
Arthritis and metabolic diseases.....	432	\$3,989,927	39	\$140,719					8	\$59,829	46	\$189,972			525	\$4,389,447
Neurological diseases and blindness.....	400	3,896,288	41	140,827					55	890,762	31	103,081			527	5,039,958
Cancer.....	720	8,159,924	252	860,725			130	\$2,196,261			139	498,684	77	\$1,143,874	1,338	12,859,468
Dental.....	49	420,969	18	70,220	65	\$28,080									132	519,239
Microbiology.....	236	2,109,703	32	115,734	24	10,368									268	2,225,437
Heart.....	731	7,749,990	236	862,418			109	2,301,834			106	396,395			1,206	11,381,005
Mental Health.....	223	3,686,287	48	186,827			52	567,845	233	13,738,359					556	8,079,321
General (Division of Research Grants).....	470	3,988,512			287	123,984									777	4,112,496
Total.....	3,261	33,901,630	666	2,395,470	376	162,432	291	5,125,943	296	4,688,950	342	1,188,182	77	1,143,874	5,329	49,006,431

1 Includes support to 756 trainees.

Table 3.—*Commissioned officers and civil service personnel as of June 30, 1955*

	Full time			Part time (civilian)					
	Grand total full-time	Commis- sioned officers	Civilian	Total part-time	When actually employed	Without compen- sation	Other		
			Total	Washing- ton metro- politan area	States	Outside United States			
Public Health Service.....	16,225	12,597	13,628	6,163	7,285	180	2,924	32,490	140
Office of the Surgeon General.....	522	47	475	433	22		6	3	1
Immediate Office of the Surgeon General.....	21	6	15	15			1	1	
Division of Finance.....	119		119	119					
Division of Administrative Services.....	111	6	105	89	16		3	1	1
Division of Personnel.....	132	12	120	120			2	1	
Division of Public Health Methods.....	70	2	68	63	5				
Offices other than Divisions (Health Emergency Planning, Information, Executive).....	53	5	48	47	1				
Details to other agencies.....	16	16							
Bureau of Medical Services.....	8,122	1,149	6,973	1,178	5,676	119	362	95	109
Office of the Chief.....	12	4	8	8			1	1	
Division of Administrative Management.....	81	2	79	79					
Division of Dental Resources.....	15	4	11	11					
Division of Foreign Quarantine.....	580	57	523	21	404	98	81	70	8
Division of Hospitals and Medical Facilities.....	81	9	72	72				5	
Division of Hospitals.....	6,092	801	5,292	142	5,131	19	260	149	24
Freedmen's Hospital.....	824		824	824			13		87
Division of Nursing Resources.....	15	6	9	9					13
Details to other agencies.....	421	266	155	12	141	2	2	1	1
Bureau of State Services.....	2,933	1,830	2,123	726	1,336	61	2,455	32,367	8

Office of the Chief.....	87	4	83	82	1	1	11	2	11	2
Division of Dental Public Health.....	34	9	23	23	2	2	2,314	27	5	2
Division of General Health Services.....	341	45	295	253					2,287	
Division of International Health.....	77	20	57	57					1	
Division of Sanitary Engineering Services.....	383	114	279	65	214		16	8	6	2
Division of Special Health Services.....	880	108	575	220	341		80	31	46	3
Communicable Disease Center.....	802	238	564		553		24	12	11	1
Regional Offices.....	360	115	245	26	218					
Details to other agencies.....	180									
National Institutes of Health.....	4,628	571	4,057	3,806	251		101	54	25	22
Office of the Director.....	1,441	12	1,429	1,429					1	4
National Cancer Institute.....	631	117	514	480	34		5	7	5	5
National Heart Institute.....	348	88	290	220	40		16	12		4
National Institute of Arthritis and Metabolic Diseases.....	331	74	257	257			3		2	1
National Institute of Dental Resources.....	72	27	45	44	1		4	1	1	2
National Institute of Mental Health.....	281	63	218	192	26		18	9	5	4
National Institute of Neurological Diseases and Blindness.....	125	21	104	103	1		17	16		1
National Microbiological Institute.....	430	73	357	307	149		3	1	1	1
Division of Research Grants.....	113	4	109	109						
Clinical Center.....	790	91	699	699			10		10	
Division of Biologics Standards.....	66	1	65	65			8	8		

* Includes 1,190 Regular officers and 1,407 Reserve officers.

† Excludes those part-time employees not paid during the month of June 1955.

‡ Includes 2,280 collaborating epidemiologists and special agents.

Table 4.—Payments to States, fiscal year 1955

(In thousands)

State	Vene- real dis- ease special projects	Tuber- culosis control	Gen- eral health	Mental Health activi- ties	Cancer control	Heart disease control	Medi- cal fa- cilities survey and plan- ning	Hos- pital con- struc- tion	Com- munity facili- ties
Total.....	¹ \$707	\$4,491	\$9,724	\$2,317	\$2,230	\$1,066	\$155	\$73,004	\$1,431
Alabama.....	29	108	290	51	52	31	3	2,348	11
Arizona.....	10	53	75	12	13	-----	2	209	-----
Arkansas.....	11	76	177	30	36	21	2	2,042	4
California.....	5	266	531	132	140	49	13	3,079	194
Colorado.....	8	32	98	19	23	16	2	769	-----
Connecticut.....	9	53	92	25	26	15	3	291	-----
Delaware.....	-----	17	17	18	5	12	-----	436	-----
District of Columbia.....	20	43	35	18	10	12	2	181	-----
Florida.....	62	81	218	45	47	26	20	1,887	-----
Georgia.....	84	118	293	55	58	31	2	3,539	42
Idaho.....	3	16	58	18	13	13	-----	300	5
Illinois.....	4	227	402	105	118	39	7	1,872	178
Indiana.....	-----	89	219	56	53	24	-----	1,185	18
Iowa.....	1	39	153	26	39	21	-----	1,206	-----
Kansas.....	-----	39	127	24	29	18	-----	688	370
Kentucky.....	7	126	248	47	51	28	5	2,061	9
Louisiana.....	13	88	215	42	44	20	6	2,077	-----
Maine.....	-----	27	69	18	15	9	2	654	-----
Maryland.....	3	87	130	32	32	20	-----	1,003	-----
Massachusetts.....	-----	124	241	63	69	27	11	2,147	-----
Michigan.....	1	150	334	88	74	24	-----	1,992	-----
Minnesota.....	-----	52	181	39	45	23	4	927	-----
Mississippi.....	20	85	248	39	46	28	-----	2,134	-----
Missouri.....	28	109	232	55	60	26	7	1,482	49
Montana.....	-----	19	52	18	13	13	-----	192	-----
Nebraska.....	-----	26	96	18	22	11	3	738	-----
Nevada.....	-----	12	29	15	6	10	-----	256	-----
New Hampshire.....	-----	11	36	18	-----	10	-----	550	-----
New Jersey.....	11	129	238	66	68	27	-----	1,308	75
New Mexico.....	10	34	72	18	15	14	5	449	13
New York.....	42	400	645	189	183	56	-----	2,512	-----
North Carolina.....	53	114	358	64	65	24	8	2,211	71
North Dakota.....	-----	26	59	18	14	13	3	68	-----
Ohio.....	19	190	409	108	108	40	-----	3,818	-----
Oklahoma.....	3	63	165	32	36	21	4	1,567	-----
Oregon.....	-----	34	105	20	23	15	-----	322	5
Pennsylvania.....	19	267	547	142	144	51	-----	4,400	-----
Rhode Island.....	-----	23	43	18	12	8	-----	86	-----
South Carolina.....	40	81	199	36	37	24	4	2,104	290
South Dakota.....	1	10	61	18	13	7	-----	341	-----
Tennessee.....	55	127	261	49	49	26	-----	2,338	-----
Texas.....	73	192	520	116	109	31	12	4,983	-----
Utah.....	-----	13	66	18	11	13	1	546	-----
Vermont.....	-----	17	31	18	8	² 12	-----	5	-----
Virginia.....	28	109	249	52	51	-----	6	1,811	-----
Washington.....	-----	51	132	33	29	19	-----	1,202	97
West Virginia.....	4	60	141	29	30	19	-----	1,189	-----
Wisconsin.....	-----	59	174	43	39	18	15	1,802	-----
Wyoming.....	3	11	37	9	8	4	1	232	-----
Alaska ³	-----	48	41	18	2	10	-----	101	-----
Hawaii.....	-----	34	35	18	7	13	2	459	-----
Puerto Rico.....	25	218	235	31	29	23	-----	2,905	-----
Virgin Islands.....	3	8	5	18	1	1	-----	-----	-----

¹ Includes \$109,000.00 in services and supplies (including drugs from stock purchased in prior years) furnished in lieu of cash.

² Vermont allotment paid to Vermont Heart Association.

³ An additional payment of \$613,000.00 was made to Alaska for disease and sanitation investigation and control activities.

Office of Education

A REPORT of the work of the Office of Education is, in some respects, a report of the problems and achievements of American education. It is not surprising, therefore, that a report of Office activities in the fiscal year 1955 should reflect some of the awakened concern of the American public in matters pertaining to education. As citizens generally have turned their attention to the pressing educational problems confronting them, the Office of Education also has been mobilizing itself to provide greater assistance and leadership in the task of providing the Nation with an educational system equal to its growing needs. Chief among the activities of the Office designed to this end were the reorganization of the Office itself, and the launching of the White House Conference on Education.

REORGANIZATION

The primary obligation of the Office is to provide leadership and services that will aid the educational profession and the public in providing essential education for the Nation. In order that the resources of the Office could be mobilized more effectively, the staff activities were reorganized during the past year under three broad areas: (1) Research, (2) Services, and (3) Grants.

The research coordinator is responsible for the collecting and processing of statistical data on the status and trends of elementary, secondary, and higher education, and for special research studies, including those under the Cooperative Research Program authorized under Public Law 531 of the 83d Congress. The latter permits the Office for the first time to enter into contracts with colleges, universities, and State educational agencies for the conduct of research, surveys, and demonstrations in the field of education.

The services coordinator has responsibility for relating services of International Education, State and Local School Systems, Vocational Education, and Higher Education.

The grants coordinator at present supervises grants appropriated by Congress for construction, maintenance, and operation of schools in federally affected areas.

It is expected that this overall reorganization of the Office about these three major areas will greatly increase the effectiveness of its assistance to educators and the public.

WHITE HOUSE CONFERENCE

On July 26, 1954, President Eisenhower signed P. L. 530 which provided for the establishment of the White House Conference on Education. The Office of Education has been privileged to assist the Presidential Committee and the staff of the White House Conference in inaugurating this historic effort, which culminated with the national conference on November 28-December 1, 1955.

The Presidential Committee for the White House Conference met for the first time on December 2, 1954, holding four additional meetings during the fiscal year. The Committee, consistent with the expressions of the President and the intent of Congress, defined its responsibilities in the following terms: (1) to assist, when invited, in planning conferences in the States and Territories; (2) to organize a White House Conference on Education; and (3) to make a report to the President on the "significant and pressing problems in the field of education." It was agreed that the program of the Committee would be directed at the following purposes:

1. Bringing about a more widespread knowledge and appreciation of, and interest in, education.
2. Helping to create a continuing concern on the part of great numbers of citizens to face their responsibilities toward education.
3. Serving to bring about an analysis of the current condition of our educational system.
4. Providing examples of solution to educational problems and inspiration for an accelerated effort in planning more action programs of school improvement.
5. Providing the basis for a report to the President of the significant and pressing problems in the field of education and making recommendations, insofar as possible, for their solution.

The Committee decided that the scope of the White House Conference program should be limited to consideration of the problems of elementary and secondary education, but that these problems should be considered in the light of our total system of education. With these purposes clearly set forth, the Committee's program developed

rapidly. Throughout the Nation attention was directed toward developing answers to six questions which would form the agenda for the White House Conference.

1. What should our schools accomplish?
2. In what ways can we organize our school systems more efficiently and economically?
3. What are our school building needs?
4. How can we get enough good teachers—and keep them?
5. How can we finance our schools—build and operate them?
6. How can we obtain a continuing public interest in education?

It was felt that the Committee, as a part of its reporting function, had an obligation to develop its own facts and conclusions regarding the six key questions.

Six subcommittees were formed, each assisted by highly qualified educational consultants, to make independent studies of these questions and to prepare helpful discussion materials for distribution to the persons who would participate in the White House Conference.

The central purpose of citizen conferences was to bring about a greatly increased awareness of educational problems on the part of a broad cross section of the American people—the kind of awareness which would result in continuing astute and determined citizen action on every level of government.

To this end, the Committee worked closely with 24 national organizations broadly representative of the American people and of the education profession. In addition, several hundred smaller organizations were contacted to interest them in the program. National organizations, through their publications and by direct contact with State and local affiliates, were instrumental in informing the Nation of the nature of the program and enlisting the active interest and participation of as many citizens as possible.

Every State in the Union, the Territories of Alaska, Hawaii, Puerto Rico, and the Virgin Islands, and the District of Columbia made plans to participate in the program. During the past year, all 52 States and Territories and the District of Columbia voluntarily held conferences on education prior to the White House Conference. Some of the States which held early conferences scheduled a second one prior to the White House Conference. During the year 29 States went beyond holding a single State conference and conducted community, county, and regional conferences as a part of their State programs.

While the accomplishments of the President's White House Conference on Education are properly within the scope of the fiscal 1956 report, it is not too early to report that, in terms of citizen interest and enthusiasm, this Conference is a milestone in American educational history.

INCREASED ENROLLMENTS AND RELATED PROBLEMS

In the past few years much concern has been voiced over the increased enrollments in the schools and the problems created by this increase. The total school enrollment at all levels, in both public and nonpublic schools, has been estimated at 38,113,500 for the 1954-55 school year, an increase of almost 2 million over the previous year. These pupils represent 23 percent of the estimated total population of 162,187,000 on June 1, 1954. It is estimated that by 1959-60 the total school enrollment at all levels will reach 46 million.

The estimated increase of 1,692,000 pupils in elementary and secondary enrollments in 1954-55 over 1953-54 is the largest single year increase recorded. The 1,473,000 increase in elementary pupils is 5.6 percent above last year, and the 219,000 increase in secondary pupils is 3.0 percent above last year. Enrollment in institutions of higher education increased 12.1 percent during this period.

*School enrollments in the continental United States, 1953-54 and 1954-55*¹

Elementary schools (including kindergartens):	1954-55	1953-54
Public.....	24,091,500	22,801,400
Private and parochial.....	3,506,200	3,325,400
Residential schools for exceptional children ²	65,000	65,000
Model and practice schools in teacher-training institutions.....	38,300	37,900
Federal schools for Indians.....	27,400	27,500
Federal schools under Public Law 874.....	9,600	7,800
Total elementary.....	27,738,000	26,265,000
Secondary schools:		
Public.....	6,582,300	6,388,000
Private and parochial.....	774,800	751,200
Residential schools for exceptional children ²	11,100	11,100
Model and practice schools in teacher-training institutions and preparatory departments of colleges.....	40,500	40,000
Federal schools for Indians.....	12,300	11,800
Federal schools under Public Law 874.....	1,000	900
Total secondary.....	7,422,000	7,203,000
Higher education:		
Universities, colleges, professional schools, including junior colleges and normal schools.....	2,740,000	2,444,000
Other schools:		
Private commercial schools.....	144,000	131,000
Nurse training schools (not affiliated with colleges and universities).....	69,500	71,900
Total other schools.....	213,500	202,900
Grand total.....	38,113,500	36,114,900

¹ Office of Education estimates.² In addition to those provided for in day schools.

Approximately 60,000 public elementary and secondary classrooms and related facilities were constructed in the United States during the 1954-55 school year. It is estimated that the capital outlay investment for these facilities was in excess of \$2 billion. In spite of this all-time high in school construction, the country still faces a large school building program because of increasing enrollments, population mobility, school district reorganization, and wide demands for an extended and enriched program of education and community services.

The nationwide School Facilities Survey conducted by the Office of Education revealed that States have projected their plans for meeting school plant needs to the extent of 476,000 classrooms during a period of five school years (1954-55 to 1958-59, inclusive), at an estimated aggregate capital outlay cost of more than \$16 billion, exclusive of planned rehabilitation.

The primary source of school construction funds has been school district bonds supported by local property taxes. There are trends, however, toward school district reorganization and State aid for capital outlay which will broaden the fiscal base and improve methods of financing school construction.

Planning school plants is becoming more and more a cooperative procedure. School architects, administrators, supervisors, teachers, pupils, furniture manufacturers, and lay citizens cooperate in planning school facilities. School buildings and equipment are thus becoming more functional and better adapted to educational requirements.

Specialists in curriculum, school buildings, and furniture and equipment, in Federal and State governments and in colleges and universities, are assisting local school officials and architects in the initial planning for the space required for different courses and learning activities, the equipment needed for effective instruction, proper lighting for a variety of seeing tasks, and suitable heating, ventilating, sanitation, and sound control. Final decisions on these matters, however, are made by local school officials, subject to State regulations.

School programs today include a variety of learning situations which entail many activities and instructional materials. Such programs demand classrooms designed for multiple purposes. The trend in elementary school planning is toward a self-contained classroom of 900 or more square feet with work counter, sink, toilet, storage compartments, chalk and tack boards, display cases, and movable furniture and equipment. Such rooms are readily adapted to accommodate a variety of activities. Secondary school plants are usually designed with special classrooms for science, art, music, homemaking, business education, crafts, and various types of vocational and prevocational shops. The trend in secondary school planning, however, is toward

some multi-use classrooms which will serve more than one specialized subject area.

The shortage of teachers continued during 1954-55, and elementary and secondary schools will need a total of 229,700 new teachers when the schools open this fall. These teachers will be required (1) to replace 91,200 emergency teachers; (2) to replace 83,300 qualified teachers who will leave the profession; and (3) to provide the 55,200 teachers needed for the increase in enrollment. It is estimated that 25,000 of the emergency teachers will become qualified by the time school opens. In addition, 95,186 teachers completed certification requirements in 1955, but only 63,400 of these are expected to accept teaching positions. With only 88,400 new qualified teachers entering the profession, there will be a deficit of 141,300 teachers when schools open in the fall. The 141,300 shortage will have to be made up by more emergency teachers, by teachers returning to the profession who did not teach during the last year, and by more overcrowding. The figures given above do not include any teachers to reduce present overcrowding nor to enrich the curriculum.

The annual estimates submitted to the National Education Association by the State departments of education showed an average annual salary per member of instructional staff in 1954-55 of \$3,932. The average elementary school classroom teacher's salary was \$3,615; among secondary school teachers the average was \$4,194.

Supply and demand for elementary and secondary public and nonpublic school teachers, 1955-56

Item	Elementary and secondary
Supply:	
Total teachers, 1954-55 ¹	1, 201, 800
Less emergency teachers, 1954-55.....	91, 200
Total qualified teachers, 1954-55.....	1, 110, 600
Less 7.5 percent turnover.....	83, 300
Qualified teachers returning for 1955-56.....	1, 027, 300
Emergency teachers qualifying for 1955-56.....	25, 000
New supply of qualified teachers (79 percent of elementary and 56 percent of high school teachers trained in 1954-55).....	63, 400
Total qualified supply, 1955-56.....	1, 115, 700
Demand:	
Total teachers, 1954-55.....	1, 201, 800
Teachers needed to meet increase in enrollment in 1955-56 ¹	55, 200
Total demand, 1955-56.....	1, 257, 000
Shortage of qualified supply.....	141, 300

¹ See footnote 1, on following page.

SOURCE: Office of Education Circular No. 417, Revised, and estimates for 1955-56; and *The 1955 Teacher Supply and Demand Report* of the National Education Association.

JUNIOR HIGH SCHOOL

During fiscal 1955 the staff of the Office of Education gave considerable attention to the reorganization of secondary education and problems associated with the junior high school. Studies indicate that the reorganization of schools to include some form of junior high school has gone forward rapidly in recent years, especially since 1946.

The number of seventh- and eighth-grade pupils enrolled in the secondary schools rose almost continuously from 142,000 in 1920 to 1,993,000 in 1952. During the same period, enrollments in these grades in the 8-4 schools fell from 2,778,000 to 2,025,000. This drop is due chiefly to the shifting of these grades to the new junior high school forms of organization.

In 1920 there were less than 5 percent of the seventh- and eighth-grade pupils in the reorganized schools; by 1952 this proportion had risen to almost half (49.6 percent) of the total. The rapid increase in total secondary school enrollments coupled with the reorganization of secondary schools has necessitated the construction of many new school facilities.

These developments have caused some educators to raise questions concerning the junior high school as a unit in secondary education. Has the junior high school been set up because of expedient administrative and building considerations, or is it the best organization to provide general education for early adolescents 12-15 years of age? Does it clearly demonstrate superiority over the traditional 8-4 plan? Have its purposes changed so much since its origin in 1909 as to suggest that the junior high school needs a new redirection? These questions have stimulated a surge of professional interest in the junior high school.

Because of the wide and growing interest in the junior high school, the critical demands for more buildings for youth of this age group, and the unavailability of recent data the office staff sponsored a National Conference on Junior High Schools. An analysis was also made of State department of education policies and regulations affecting the junior high school. As a result of these activities several national professional organizations and State departments of education are now making studies of this important segment of secondary education.

¹The number of elementary and secondary school teachers in *public* schools, in the fall of 1954, was 1,065,803 (Office of Education Circular No. 417 Revised). To this must be added the number in nonpublic schools (private and parochial), in model and practice schools of colleges and universities, in residential schools for exceptional children, and in schools operated under Federal auspices. The number of teachers in this group of schools was estimated as 136,000, on the basis of 1 teacher to every 33 pupils—the ratio prevailing in the Roman Catholic schools which enroll 88 percent of the pupils in this group.

EDUCATIONAL TV

At the beginning of fiscal 1955, there were 7 non-commercial educational television stations in operation. During the year, 1 of the 7 suspended operation pending reorganization, and 9 new stations went on the air, bringing the total of the educational television stations to 15. At the close of fiscal 1955, 11 additional stations were actually under construction, 16 more had already received their construction permits from the Federal Communications Commission, and applications for 13 more had been filed.

A look at the 15 educational TV stations in operation at the end of fiscal 1955 reveals 5 distinct types of licenses. Six of the 15 are owned and operated by State universities. Four stations are owned and operated by non-profit educational television corporations formed specifically to serve educational and cultural needs of all elements of the population of the local metropolitan areas. Three of the stations are owned and operated by State educational broadcast councils financed from State appropriations. One station, KUHT of Houston, is owned and operated by a city university, the University of Houston. One station, WGBH-TV of Boston, is owned and operated by the Lowell Foundation, an endowed foundation serving educational and cultural needs of the Boston metropolitan area.

On the whole, educational television station development, already involving an expenditure of more than \$10 million for equipment alone, is showing a decidedly healthy growth. Now that educational station planners no longer feel themselves under compulsion to get their stations on the air immediately, lest locally reserved educational television channels be re-assigned for commercial use, more attention is being given to planning educational program services, and to developing sound bases for financing station operating and programming costs. In fact, the trend today seems to be to select and train the production staff first, starting actual production over closed circuit facilities on an experimental basis while funds for station construction and operation are being raised.

The growth of educational television development seems in no way to have dimmed the interest of schools and colleges in radio broadcasting. In the year just ended, some 30 new educational FM stations have gone on the air, bringing the total of non-commercial educational radio stations in operation to 160.

EXCEPTIONAL CHILDREN

During the year, the Office of Education continued to give leadership to the nationwide study on the Qualification and Preparation of Teachers of Exceptional Children. A study was made of the distinctive competencies needed by teachers of the blind, crippled, deaf, gifted, hard-of-hearing, mentally retarded, partially seeing, special

health cases, socially maladjusted, and speech-handicapped. Included also was an evaluation of the competencies needed by special education personnel in colleges and universities, and in administrative positions in State and local school systems.

Four publications have now come from the study and others are nearing completion. The results of the study were presented at various National, State, and regional meetings throughout the year. It is anticipated that the findings will form the basis for improved programs for exceptional children through the development of better in-service and pre-service preparation of teachers.

CIVIL DEFENSE EDUCATION

A delegation of authority by the Federal Civil Defense Administration to the Department of Health, Education, and Welfare gave the Office of Education the responsibility for planning, developing, and distributing materials which will assist schools in teaching civil defense skills, knowledge, and fundamentals of behavior during emergencies. Contractual agreements were made with State departments of education in Connecticut, Michigan, and California to establish pilot centers for the development of civil defense instruction materials for teachers in various subject areas and at all levels. The Office of Education aided the State pilot center staffs by reviewing and evaluating technical reports developed by the Federal Civil Defense Administration and other government and non-government agencies.

ASSISTANCE TO SCHOOLS IN FEDERALLY AFFECTED AREAS¹

A major activity of the Office during the 1955 fiscal year was administration of the grant programs authorized for those school districts which have experienced a severe financial burden as a result of activities of the United States. The fiscal year 1955 was the fifth year these programs, authorized by Public Laws 815 and 874 of the 81st Congress, had been in operation. Public Law 815 authorizes financial assistance for construction of school facilities needed to house increased school enrollments resulting from new or expanded Federal activities, mostly military installations. Public Law 874, the companion law, provides Federal assistance for current operating expenses each year to take the place of local revenues lost primarily because of the nontaxable status of federally owned land on which the school children live or on which their parents work.

Passage of these two Acts in September 1950 marked the first attempt by the Congress to establish a uniform policy governing the allocation of financial assistance to school districts seriously affected by Federal

¹ For a more detailed discussion of the operations of this program under Public Laws 815 and 874 (81st Cong.), as amended, see Fifth Annual Report of the Commissioner of education concerning the administration of Public Laws 874 and 815.

activities and to place the administration of this program in one administrative agency. The Laws also attempted to establish an objective method of determining the extent of the Federal financial burden and the amount of Federal assistance to which each district was entitled. Accordingly, each Act established specific requirements for eligibility, defined the categories of Federal impact for which payment would be made, and included a formula for determining the amount of assistance. In addition to grants to local educational agencies Public Law 815 recognized the necessity for and authorized the construction of temporary schools in certain situations and the Federal construction of schools on Federal bases where necessary in order best to serve the children. Public Law 874 recognized the necessity for and authorized the Commissioner of Education to arrange for providing free public education for children living on Federal enclaves when no State or local educational agency was responsible for or was able to provide suitable education for such children.

The original Public Law 815 provided Federal assistance for increases in school enrollment which resulted from Federal activities which occurred from the beginning of World War II in 1939 to June 30, 1952. This program was extended in August 1953 by the passage of Public Law 246 to provide for increases in school enrollment occurring from June 30, 1952, to June 30, 1954. Early in the 1955 fiscal year, Congress again extended this program by the passage of Public Law 731 to provide for school enrollment increases occurring during the period June 30, 1954, to June 30, 1956. An appropriation of \$70 million was made early in the 1955 fiscal year for allocation to projects filed by June 30, 1954, and for completion of that program. In April 1955 Congress made available an additional \$70 million for the first year of the newly authorized program. Thus, a major activity of the Office during the year has been the analysis of applications submitted for the new 2-year period, an allocation of funds to approved projects, and the completion or moving toward completion of projects already approved from prior years' appropriations.

By June 30, 1955, a total of \$585,000,000 had been appropriated for construction of school facilities in federally affected school districts. In addition, an estimated \$230,000,000 had been added to the projects from local funds. These funds were used or will be used to help build 2,700 school buildings in local districts and 134 federally constructed projects located on 83 Federal installations. It is estimated that this program will have helped provide approximately 25,000 classrooms and related school facilities which will be sufficient to house an estimated 750,000 children.

During the fiscal year, 2,831 school districts applied for assistance under Public Law 874 for maintenance and operation of school plants. Of these, 2,700 were determined to be eligible for approximately \$75

million. In addition there were 31 federally operated on-base projects under the provision of section 6 of the Act. The eligible school districts had an average daily attendance of 910,000 federally connected children on which payments were authorized and an estimated total attendance of over 5,500,000 pupils.

While Federal activities, particularly those connected with defense contracts, have stabilized throughout the country there continues to be a number of new Federal impact areas resulting primarily from new or expanded Air Force installations, reclamation project activities, and atomic energy projects. Continued construction of housing for military personnel on or near military installations also increases school enrollment in the Federal impact areas. Thus there was an increase of 177 eligible school districts in the 1955 fiscal year over 1954 and an increase of about 3 percent in the cost per pupil resulting in an increase of approximately \$10 million in the cost of the program.

Another major activity occupying the Division during the year was securing compliance with the January 1954 order of the Secretary of Defense that no school located on military installations could be operated on a segregated basis after the fall of 1955. There were 24 schools located on Federal property operated by local educational agencies on a segregated basis during the 1954-55 school year. Compliance with the order of the Secretary of Defense required ascertaining whether local educational agencies operating on-base schools could in the 1955-56 school year operate those schools on an integrated basis or whether Federal operation under section 6 of the Act would be necessary and, if so, preparing the necessary budgets and arranging for such operation.

Of the 24 schools located on Federal property 20 were federally owned schools located on military installations and operated by local educational agencies on a segregated basis during the 1955 fiscal year. Four of these have been discontinued, 8 will be operated on an integrated basis by local educational agencies in the 1956 fiscal year, and 8 will be operated by the Federal Government on an integrated basis. The remaining 4 projects are locally owned schools located on property leased by the local educational agencies from the Department of Defense. These schools will be operated on the same basis as are other schools in these districts.

VOCATIONAL EDUCATION

The Office of Education administered approximately \$31,000,000 of Federal vocational education funds appropriated for allotment to the States and Territories for the fiscal year ending June 30, 1955. This was an increase of \$5,000,000 over the previous year. The additional funds were used primarily to extend the program to communities not previously having vocational programs.

The Assistant Commissioner for Vocational Education was made an ex-officio member of the Federal Committee on Apprenticeship. The Office participated in several Federal-State apprenticeship agency joint conferences called by the U. S. Department of Labor. Closer working relationships were established in the apprenticeship program in the matter of understandings of the respective responsibilities of this Office and these agencies in the gathering of statistics and the development of programs of related instruction for apprentices conducted by public schools.

A conference of State directors of vocational education was held to consider policy matters in the administration of the total program of vocational education. Areas studied included vocational guidance, distributive education, home economics, trade and industries, and agriculture. The recommendations of the conference will be used as a basis of future considerations of policy.

The Office also held a planning conference on research in agricultural education in which recommendations made by the National Committee on Research in Agricultural Education were considered. As a result, a comprehensive study is to be made of the Young Farmer Program and a publication on the subject issued for use by vocational leaders in agricultural education.

Staff members met with representatives of producers of both natural and synthetic fibers to plan a training program in textile fibers for salespeople employed in stores, including high school students enrolled in cooperative distributive education programs.

The shortage of teachers of home economics persists although 7,693 persons were enrolled in college courses in 1954 preparing for the teaching of home economics. The shortage is due to the facts that home economics teachers marry after a few years of teaching and leave the profession, and that programs of home economics are being established in many more schools each year.

The shortage of coordinators of local cooperative programs in distributive education and persons qualified for State level positions in the program has become acute. The shortage in this field is due in part to the fact that increased Federal funds were available for 1955 following several years of decreases in Federal funds which resulted in the curtailment of teachers and coordinator training programs in some of the States.

The shortage of vocational agriculture teachers has become more acute than at any time since World War II despite the fact that 3,479 persons were being trained by the colleges as such teachers. The shortage in this field is due largely to the fact that most of the vocational agriculture teachers are trained in the land-grant colleges where they take military training and become reserve officers. After serving several years, many go into other than teaching occupations.

Increased demand for agricultural college graduates by commercial concerns and State and Federal agricultural programs also contributes to the shortage.

LAND-GRANT COLLEGE AND UNIVERSITY FUNDS

Each year the Office of Education initiates certification as to each State and Territory (1) whether it is entitled to receive its share of the annual appropriations for the land-grant colleges and universities and (2) the amounts it is entitled to receive. The certification for the year ending June 30, 1955, for the Bankhead-Jones funds (annual appropriations) amounted to \$2,501,500 and that for the Morrill-Nelson funds (permanent appropriation) amounted to \$2,550,000, a grand total of \$5,051,500.

COLLEGE HOUSING PROGRAM

The Office of Education provided advisory service to colleges and universities and the Housing and Home Finance Agency on new applications in the amount of \$70,000,000 during fiscal 1955. These loan requests are anticipated to provide residential facilities for 20,928 single students, 1,020 married students, and 323 faculty members.

The prevailing interest rate of 3.25 percent deterred many applicants from completing loan requests and financing needed residential facilities. Privately operated institutions used the program to a greater extent than publicly operated institutions because the 3.25 interest rate is still favorable to the private college or university. Publicly supported institutions tended either to delay construction or, in some favorable instances, to secure loans at interest rates slightly under the College Housing Program rate. Associations in higher education continued to request lower interest rates, preferably under 3 percent, and a release of all remaining funds for immediate use.

Private investors continued to participate in the program. During Fiscal 1955, individuals and syndicates are reported to have purchased approximately \$8,000,000 in college housing revenue bonds when opened to competitive bids under the College Housing Program. A few 40-year issues were sold to private investors, but the usual pattern was that only the earlier issues were purchased by private investors.

ADULT EDUCATION

During the year the Office of Education gave recognition to the rapidly growing movement of adult education by creating an Adult Education Section. Its purposes are to: (a) provide consultative services to State and local school officials, teacher-education institutions, professional and lay organizations, and Federal agencies on needs in and problems of adult education; (b) conduct and publish

studies in the field of general adult education, including the education of the aging and aged; (c) participate in conferences and workshops on the various phases of adult education; and (d) establish and maintain cooperative relationships with professional and lay organizations and voluntary agencies interested in the field.

INTERGROUP EDUCATION

The Office of Education cooperated actively with the National Education Association and the American Teachers Association in developing a packet of materials and a leader's guide on intergroup education for leaders of adult community groups. The purpose of the packet and leader's guide is to provide an overall orientation to the several aspects of the problems involved in achieving improved human relations. While the packet is concerned with the general subject of intergroup relations, it will be found useful to persons interested in the implementation of the Supreme Court's opinion on school segregation.

INTERNATIONAL EDUCATION

Education has an increasingly important role in international affairs. First, it is one of the best ways to help people to become acquainted with each other. Various cultural programs designed to promote understanding seem to grow in scope and effectiveness with each passing year. Secondly, education is a necessity for people who are learning new technical skills needed to improve their standard of living. Technical assistance to people less advanced mechanically than ourselves is an increasingly important component of our foreign policy, and is in fact a program of education.

Substantial funds of the United States and other governments are supporting international educational programs, both on the country-to-country and on the United Nations basis. Private organizations also are investing large sums in educational enterprises designed to increase international understanding, and to improve economic conditions.

The Office of Education has a growing part in supporting many of these programs, although it has direct operating responsibility for only a small part of the Federal investment in international education. The Office serves as adviser and agent for a number of Federal international activities, and also is frequently asked to provide advisory services to numerous private organizations and individuals.

One evidence of the growing importance of education in relations between nations is in the agendas of international conferences. The Office has an increasingly important responsibility in advising the Department of State concerning important educational issues, and

in preparing position papers for the guidance of American delegates to a variety of international conferences.

The new role of the United States in international affairs is reflected in schools and universities by the need for new courses, the revision of existing courses, and in a variety of research programs. Lay groups and organizations are carrying on related activities.

The Office is asked advice concerning curriculum development for children in elementary schools of the United States to help them become acquainted with the peoples and cultures of other countries. Secondary schools are experimenting with programs designed to stimulate in young people an interest in, and a better understanding of, current affairs. Teaching about the United Nations and its specialized agencies is another approach to international understanding. School systems, State departments of education, private publishing companies, and Government agencies are publishing bulletins, yearbooks, and articles to assist schools in developing programs of international understanding. The Office serves a useful function in helping educators to avoid propaganda, and to develop a sound approach to international education which is in harmony with our national interest.

Both Government and business are turning to the universities for specialists in international affairs. Institutions of higher education are providing more area programs, more facilities for overseas research, and improved collections of source materials and training for scholars specializing in international relations.

Exchange of persons programs sponsored by the United States Government and by private organizations are bringing thousands of students and educators from other countries to the United States, and have greatly stimulated an interest in international education. Colleges and universities, State departments of education, thousands of schools, private educational organizations, as well as community groups and private citizens, have cooperated in providing for these visitors educational experiences and an insight into American life and culture. The opportunity to assist in this program has given countless citizens of our country an opportunity to obtain firsthand information about, and to develop a deeper understanding of, the people and lands from which these visitors came.

In cooperation with the Department of State during the year 1954-55 the Office of Education arranged exchange and one-way teaching assignments for 436 teachers and school administrators from the United States and cooperating countries. In addition, 305 visiting educators came on 6-month training grants under the Teacher Education Programs.

During the 1954-55 school year the Office of Education continued to work with the Foreign Operations Administration in the development

of technical assistance programs of education in 34 countries. One hundred thirty-four educators were recruited by the Office for appointment by the Foreign Operations Administration to serve in educational missions in these countries. Professional and technical consultation was provided by the Office, and the Foreign Operations Administration was advised on the development of university contracts for carrying out assignments in education overseas. Under this same program, 700 educators from more than 30 countries were brought to the United States for training in a wide variety of fields to promote their countries' economic, social, and educational development.

Assistance was continued to university and college registrars, State Boards of Licensure, and the U. S. Civil Service and other Federal agencies in the interpretation of credentials for study in other countries, totaling 2,900 requests. The Veterans Administration also continued to call upon the Office for recommendations regarding the level of instruction in certain courses offered by foreign schools for United States war veterans.

The Clearing House in the Office of Education, established at the request of the Department of State to maintain a file of information concerning persons entering and leaving the United States under the various Federal Government-sponsored exchange programs, including that of the Foreign Operations Administration, increased its list from 15,000 to 21,000 individuals this year. To date, some 80 different statistical studies have been prepared by the Clearing House for the Department of State.

The Office of Education, through its Educational Materials Laboratory, has provided an opportunity for visiting educators from other countries, as well as educators and laymen in the United States, to examine representative textbooks and materials used in schools in this country. In cooperation with specialists of the Office of Education, it has assisted FOA missions, the United States Information Agency, and Ministries of Education, in selecting texts and materials for use in other countries. The Laboratory also maintains a permanent exhibit of materials produced in the FOA missions and in connection with fundamental education programs around the world.

There is a substantial and growing interest among American educators in international education. The success of these programs, both governmental and private, results from the strong public support they are receiving both in this country and abroad. There is a growing belief that education is an effective means for achieving the foundation of international stability and peace.

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- SCHOOL LIFE (9 issues—October 1954–June 1955, inclusive).

Table 1.—Grants to States: Office of Education, fiscal year 1955¹

States, Territories, and possessions	Total	White House Conference on Education	Colleges for agriculture and the mechanic arts	Cooperative vocational education	Survey and school construction	Maintenance and operation of schools
Total	\$238,974,453	\$608,048	\$5,051,500	\$30,522,885	\$120,932,499	\$81,859,521
Alabama	4,417,953	12,557	100,541	819,070	2,590,998	894,787
Arizona	3,148,719	5,000	177,477	176,617	2,175,368	714,257
Arkansas	2,509,425	7,698	89,048	604,431	1,132,542	675,706
California	42,573,053	49,155	175,599	1,462,830	25,566,322	15,319,147
Colorado	4,600,514	5,698	83,218	264,598	2,339,366	1,907,634
Connecticut	3,536,341	8,718	90,023	296,851	1,493,759	1,646,990
Delaware	369,509	5,000	73,173	165,000	102,073	24,263
Florida	5,186,416		97,644	471,508	2,989,822	1,627,442
Georgia	7,953,966	14,456	104,360	877,478	5,157,584	1,800,088
Idaho	1,455,968	5,000	75,872	183,629	757,710	433,757
Illinois	5,048,707	36,304	156,905	1,319,265	1,363,173	2,173,080
Indiana	2,998,101		109,245	791,108	1,143,720	954,028
Iowa	1,196,551	10,505	96,146	677,803	116,834	295,263
Kansas	6,280,570	8,089	89,006	447,258	2,333,609	3,402,608
Kentucky	2,404,880	11,956	99,375	831,933	694,690	766,926
Louisiana	2,091,656	11,630	96,769	587,088	833,863	552,306
Maine	1,789,914	5,000	79,115	182,301	915,335	608,163
Maryland	9,202,216	10,246	93,372	368,864	5,871,720	2,858,014
Massachusetts	1,965,333	19,759	116,789	578,702	365,219	884,864
Michigan	7,277,073	27,630	133,559	1,068,101	4,818,472	1,229,311
Minnesota	1,788,762	12,311	99,751	695,523	856,624	124,553
Mississippi	1,778,164	8,803	91,735	756,771	437,213	483,642
Missouri	3,865,391	16,517	109,448	842,619	1,573,472	1,323,335
Montana	1,272,253	5,000	75,896	177,374	667,346	346,637
Nebraska	1,778,790	5,432	83,222	350,854	271,088	1,068,164
Nevada	1,777,956	5,000	71,597	139,937	961,865	599,557
New Hampshire	695,289		75,319	162,420	27,064	425,486
New Jersey	3,508,970	20,731	118,233	580,067	1,464,102	1,325,837
New Mexico	5,287,021	5,000	76,795	180,335	3,673,202	1,351,689
New York	7,869,339	61,426	217,934	1,866,018	3,883,417	1,840,544
North Carolina	2,538,487	16,908	110,513	1,169,633	672,253	569,175
North Dakota	564,726	5,000	76,181	241,993	28,174	213,378
Ohio	9,245,196	33,747	149,269	1,335,914	4,598,671	3,127,595
Oklahoma	7,789,277	9,077	92,278	534,841	4,188,054	2,965,027
Oregon	1,470,870	6,460	85,176	320,287	528,522	530,425
Pennsylvania	3,859,025	42,870	174,720	1,752,240	561,659	1,327,436
Rhode Island	1,923,278	5,000	77,899	121,678	1,013,735	704,966
South Carolina	2,909,521	8,851	91,118	602,801	1,169,239	1,037,512
South Dakota	1,350,150	5,000	76,511	238,440	450,242	579,957
Tennessee	3,217,645	13,424	102,835	872,729	1,388,580	840,077
Texas	15,179,437		146,921	1,512,498	8,146,833	5,373,185
Utah	2,816,026		76,872	172,329	1,757,221	809,604
Vermont	336,579	5,000	73,768	162,083	44,570	51,158
Virginia	18,027,649		103,104	780,631	9,986,932	7,156,982
Washington	12,300,913	9,993	93,731	436,685	7,516,491	4,244,013
West Virginia	652,907	7,811	90,006	504,398		50,692
Wisconsin	1,445,491	14,186	104,260	745,322	130,956	450,767
Wyoming	675,054	5,000	72,898	165,000	205,685	226,471
Alaska	3,326,368	5,000	71,283		648,201	2,601,884
District of Columbia	110,139	5,000		105,139		
Hawaii	2,835,897	5,000	74,986	105,000	1,309,478	1,341,433
Puerto Rico	673,956		50,000	613,911	10,319	—274
Virgin Islands	37,092	5,000		32,980	—888	

¹ On a checks-issued basis. Does not necessarily agree with allotments or expenditures for a given fiscal year.

² Does not include \$6,725,000 paid to Housing and Home Finance.

³ Does not include \$319,716 paid to Air Force, \$2,363,051 to Army, \$13,532 to Commerce, \$5,380 to Interior, \$676,161 to Navy, and \$13,326 to Veterans' Administration.

Food and Drug Administration

THIS REPORT records the activities of the Food and Drug Administration to enforce the Federal Food, Drug, and Cosmetic Act and four less comprehensive related acts, in the fiscal year 1955. The enforcement staff averaged 800 for the year, with an appropriation of \$5,100,000, and the certification staff, supported by industry fees, was 186.

The foods, drugs, devices, and cosmetics regulated by these statutes have an annual commercial value of around \$60 billion for domestic shipments, and \$3 billion for foreign items offered for import. Many of the products involved are used daily in every home in the country.

Three important trends continued to affect the efficiency of law-enforcement operations:

- (1) Growth of population and the volume of goods produced by the food, drug, and cosmetic industries.

- (2) Growing use of advanced technological processes and new ingredients.

- (3) A continuing shift in consumer buying to factory-processed goods instead of those prepared in the home or local pharmacy.

With reduced funds in recent years, enforcement time had to be reapportioned to continue major attention to those types of violations that would most adversely affect the public. A project sampling procedure was followed to check on compliance as a whole, and then regulatory activities were directed to careless or deliberate violations. Available facilities have been used to assist the industries to improve operations. Industry groups have cooperated in these programs.

In his 1955 State of the Union message, the President called for "better consumer protection under our existing pure food and drug laws." Congress added \$384,000 to FDA's appropriation for next

year. A recruitment program in the latter part of the current fiscal year succeeded in locating candidates to fill the new positions thus made possible. These are the first new inspectors or chemists to be appointed since the drastic cut in 1953.

Seeking means to better protect the health and well-being of the millions of American consumers of foods, drugs, and cosmetics, the Secretary asked Congress for funds to have the Food and Drug Administration's activities reviewed by a representative citizens' advisory group. Appropriations were made in July 1954 and a 14-member committee appointed about the middle of the fiscal year.

The committee included representatives of consumers, industry, labor, educational institutions, medicine, law, and the judiciary. The first meeting with the Secretary was on February 3, 1955, and its report was filed on June 30, 1955. This was later published as House Document 227 (84th Congress, 1st Session). The report states that the Food and Drug Administration is not presently staffed or equipped to render the degree of consumer protection which the committee believes Congress intended the public should have. It recommends a three to fourfold expansion of the Administration within 5 to 10 years, and the application of more effective techniques to broaden consumer protection. The committee's findings will be very helpful in the future administration of the act.

Food, Drug, and Cosmetic Act

DISASTER AND DEFENSE ACTIVITIES

In the aftermath of a disaster, the primary obligation of food and drug officials is to supervise the salvage of damaged goods and prevent the use of those that would endanger the public. The most serious such catastrophe in the fiscal year, from the standpoint of volume of foods affected, was hurricane "Carol," which caused a \$5 million loss of commercially stored food in Rhode Island and Massachusetts. At Providence the products dumped included 110 carloads of fresh fruits and vegetables, 500,000 cases of canned food, and 550,000 pounds of flour that had been polluted by flood waters. Other large lots were salvaged and returned to food channels after their safety was checked.

Flood damage in Chicago, southern Colorado, and along the Ohio River also required supervision of the disposal of damaged foods, principally by local and State officials, since large wholesale stocks—primarily a Federal responsibility—were not seriously involved.

Knowledge of the hazards that may exist in the consumption of foods exposed to atomic explosion must be developed before adequate plans can be formulated for the sorting of foods exposed and the disposal of those that might injure the user.

In May 1955, tests of the effects of atomic explosion on foodstuffs were conducted in cooperation with the Federal Civil Defense Administration. Participating with the Food and Drug Administration were the Meat Inspection Service and Agricultural Research Service, U. S. Department of Agriculture; the National Canners Association; the National Association of Frozen Food Packers; and the American Meat Institute Foundation. About 60 varieties of food staples in representative types of packaging were exposed at varying distances from the explosion. The participating groups are testing the 15 tons of food exposed, not only for immediate effects, but also for long-range toxicity and nutrition changes.

A report on similar tests of drugs previously conducted was released in January 1955. It showed that of the 42 important common drug items exposed, only 2 (insulin and vitamin B₁₂) were reduced in potency.

Another FDA testing program for radioactivity was conducted in connection with "Operation Wigwam," an undersea atomic test several hundred miles off the California-Mexico Coast. Nearly 50 million pounds of tuna and other deep-sea fish taken from the exposed area were monitored with Geiger-Mueller meters, and no radioactive fish were encountered.

Late in the fiscal year, FDA began a training program for State and local officials, designed to help equip them to safeguard the food and drug supplies of the Nation in case of enemy attack. This program, under a delegation of authority to the Department from the Federal Civil Defense Administration, is designed to meet the extraordinary needs of food and drug inspection in attack areas. The classes will continue throughout the forthcoming year.

ON THE FOOD FRONT

Potential Health Hazards

Agricultural poisons.—Early in 1954, a new investigation began of practices in the spraying of fruits and vegetables during the growing season, and of spray residues on products reaching the market. The results were reassuring in some respects, disquieting in others. On the whole, the residue levels for such pesticides as lead, arsenic, DDT, BHC, and parathion were well within the range of safety.

On the other hand, the rapidly increasing number of pesticides being developed and the greater toxicity of some of these compared with those now in use are matters of concern. If used in agriculture under conditions which leave any residue at all on edible products, the margin of safety will be narrower than has heretofore been considered desirable. Of concern also is that improper use of these highly toxic substances is occasionally encountered.

One incident particularly alerted food processors to the danger of misuse of toxic pesticides on crops not specified in their labeling. When FDA learned that a highly toxic dust restricted to use on cabbage seedlings had been used close to harvest on a variety of leafy vegetables sold to frozen food processors, it began an intensive investigation. Analysis of 140 samples of the frozen foods showed high residues of the poison in 83 samples.

The packers and distributors voluntarily withheld shipments pending the investigation and destroyed about 190,000 pounds of frozen broccoli and kale containing toxic levels. Subsequent discussions at trade association meetings have brought the matter to the attention of the entire canning and freezing industries.

The field inspection and analytical coverage which can be given to the problem as a whole make surveillance inadequate. Also, more research is needed to provide suitable analytical methods.

Animal feeds.—There has been a rapid increase in the use of antibiotic and hormone drugs administered to poultry and meat animals to enhance growth, tenderize the meat, or increase the efficiency of feed utilization during the finishing period. The nature of these drugs and the manner of use are such as to classify most of them as "new drugs." Before they can be marketed, convincing evidence must be furnished that the substances are safe for the animal and do not result in the addition of drugs to edible tissues. There is also a problem of suitable disposition of the byproducts of slaughter so that organs carrying residues of the drugs will not harm animals to which they are fed.

Diethylstilbestrol for fattening beef steers and dienestrol diacetate for improving the market quality of broilers are the first estrogenic drugs for mixing in feedstuffs to be released under the new-drug provisions of the act. After a manufacturer received clearance for a premix of the diethylstilbestrol product, FDA was swamped with hundreds of supplementary applications from feed manufacturers wanting to employ it.

Legal Actions.—The proportion of potentially dangerous foods encountered each year is extremely low in comparison with the good, but immediate action is required to remove the former from the market. During the fiscal year, 1,214 tons of food were seized because the food contained deleterious ingredients, and three firms were prosecuted for permitting such contamination. One of these was an exterminator who was fined and placed on probation for 3 years for the careless use of "1080," a deadly rodenticide, in places where it could contaminate stored food, despite repeated warnings that such practices might cause irreparable harm.

Preponderant in volume of foods seized was grain treated with mercury for seed use and later mingled with untreated grain and con-

signed to mills. Since the chemical could be removed, some grain firms, in an effort to avoid having to clean large intermingled batches, offered to pay the same rates for treated batches if kept separate from the untreated lots. Three other carload lots of grain were seized because they were contaminated with borates, lead, arsenic, and zinc remaining in uncleaned railway cars that had previously been used for commercial chemical shipments.

Other foods seized because of the presence of deleterious chemicals were 5 shipments of frozen shrimp containing a quaternary ammonium preservative and 2 lots of imitation vanilla flavor containing coumarin. Glass in a pack of olives resulted in another seizure.

To Keep Food Clean

Food seized because it was filthy or decomposed, totaled 3,909 tons, and accounted for 88 percent of the food seizures. Of the 94 criminal cases instituted in the food field, 84 were based on filth charges.

The Food and Drug Administration and many industries concerned are continuing efforts to improve the sanitary handling of food all along the line from the farm to the market basket.

In January, the Secretary announced resumption of the program of seizure of grain contaminated by insects and rodents, which was temporarily suspended in the spring of 1953 pending study of the problem by a 17-man committee appointed jointly by the Secretaries of this Department and of Agriculture. The committee recommended an expanded educational program, resumption of a regulatory program on rodent-contaminated grain, and an accelerated research program on prevention, detection, and evaluation of insect infestation in grain. Steps have been taken to implement these recommendations.

The Secretary of Health, Education, and Welfare concluded, after study and discussion with the Secretary of Agriculture, that the responsibility for enforcement of the Food, Drug, and Cosmetic Act could not adequately be discharged without an enforcement program against rodent-contaminated and insect-infested grain. Twelve carloads, involving more than a million pounds, were seized between January 1 and June 30, and 15 carloads were voluntarily removed from human food channels. Levels of contamination upon which the seizure program was resumed are to be "tightened" as progress is made.

The Department of Agriculture announced that wheat which does not meet the requirements of the clean grain program will not be accepted under the Government's loan program, and if found in possession of the Government will be diverted from food channels.

Both Departments, aided by the Fish and Wildlife Service of the Department of the Interior (which is particularly concerned with rodent control), are conducting intensified educational programs

calculated to teach those who handle grain at every stage from the farm to the mill to accord it sanitary care.

Operations under the factory inspection procedure, established 2 years ago, have helped materially to educate plant management. For example, in the New England fish-processing area, 5 concerns that received reports of decomposition in the factory samples collected inquired about FDA's criteria for fitness. Their quality control men came to the District laboratory for a joint examination of suspect fish—piece by piece—with an FDA expert commenting on decomposition encountered. Such information will afford processors a basis on which they can refuse to accept questionable lots.

Table 1.—*Actions on foods during the fiscal year 1955*

Projects	Seizures	Criminal prosecutions instituted	Injunction petitions
Total.....	868	94	3
Beverages and beverage materials.....	11	5	0
Bakery and macaroni products.....	12	14	1
Cereals and grain products:			
Human use.....	203	13	0
Animal use.....	9	2	0
Chocolate, confectionery, and other sugar products.....	42	11	1
Dairy products:			
Butter.....	12	2	0
Cheese and other dairy products.....	7	8	0
Eggs and egg products.....	27	2	0
Flavors, spices, condiments.....	45	0	0
Fruits and fruit products.....	95	3	0
Meat products and poultry.....	32	8	0
Nuts and nut products.....	57	6	0
Oils, fats, and oleomargarine.....	5	0	1
Seafood.....	135	6	0
Vegetables and vegetable products.....	106	7	0
Miscellaneous foods and food adjuncts.....	33	6	0
Food for special dietary uses.....	37	0	0
Violative serving of oleomargarine.....	-----	1	0

Improvement programs are under way in the dairy industry, with industry associations participating actively in the development of methods to eliminate unfit milk. The American Butter Institute is cooperating in an educational program designed to insure rejection of unfit cream at the cream station and at the creamery and to bring about improvement in the collecting and marketing practices which contribute to cream spoilage and contamination. Cooperative activity with State enforcement agencies is continuing.

The poultry business is at a crossroads. It has mushroomed from a largely local industry to a mass-production one in a relatively short time. The ensuing problems included a higher disease rate in concentrated broods, necessity for rapid handling in processing lines, changes in dressing practices from New York dressed to eviscerated and cut-up birds, and the rapid development of frozen, precooked items, such as pies and "dinners." On the Atlantic Coast, hurricane damage required

many small processing plants to shut down, and larger ones to consolidate. Competition for raw stock is so active that some "undergrades" are accepted, which poses additional regulatory problems. Of the 32 shipments of poultry seized, 21 contained diseased birds.

The Food and Drug Administration has worked with the Public Health Service, industry representatives, and State and local officials during the past year in the development of model ordinances on poultry plant sanitation and inspection, for consideration by cities and States desiring to regulate local and intrastate commerce in dressed poultry. Another program to improve the quality of poultry resulted in the assembling of a panel of poultry-disease experts to discuss poultry inspection. Among the decisions reached, one of most significance to public health, was that adequate poultry inspection requires ante-mortem examination of the birds.

The principal problem encountered with eggs was the accumulation of incubator rejects and their transportation in privately owned trucks to other areas where they were intermingled with sound stock. It is estimated that 11,000 dozen incubator rejects are diverted to human consumption during an average week in the Southeastern States alone. Detection of the shipments is difficult because of the racketeering methods of operations, but some progress has been made by State embargoes and destruction of frozen egg products at destination points. In the Middle West, two eggbreakers were fined \$2,000 for breaking out reject eggs supposedly denatured with kerosene and mixing them with edible eggs for freezing. A large quantity of the eggs was seized. Cooperating officials in four States assisted in tracing the movement of the eggs and securing evidence which was presented in Federal court.

The short crop of peanuts, because of drought, resulted in the first import problem on peanuts since 1949. Early in 1955 the quota restrictions were raised for shelled peanuts, and later an unlimited quota was announced through the end of July. The first peanuts admitted under these provisions came from bordering countries and were of excellent quality. Later boatloads from distant tropic areas were heavily infested with live insects, and examination of every lot was required. By the end of June, 14,480 tons had been detained, of which a substantial part was later released after the nuts had been cleaned under FDA supervision. Some improvement was noted following these heavy detentions.

Pocketbook Protection

As in the previous year, most of the actions against economic cheats were primarily a byproduct of work done on sanitary and health violations. Exceptions were made, however, in a few cases where

practices of one or two concerns were seriously hampering efforts of the industry as a whole to comply with the law.

As an example, in the oyster-packing industry most of the trade has shown marked improvement within recent years in putting out an unwatered pack. One concern, however, persisted in adding up to 30 percent of water to its pack, and 15 lots were seized.

In another case, foreign shippers took advantage of FDA's relative inactivity in the economic field to ship cocoa powder adulterated with 30 percent or more of cocoa shell. The situation, which had become so bad that the shippers began to use grade designations for the adulterated cocoa, broke up promptly when entries were refused.

Seafood Inspection Service

Shrimp processors and oyster canners who meet Government requirements for sanitation and controls may apply voluntarily for Government seafood inspection service, which is supported by inspected packers' fees. Nine shrimp packers processed 12,520,864 pounds of whole shrimp and 117,520 pounds of headless shrimp under continuous Federal inspection. Five of these firms also produced 75,743 cases of canned oysters.

PRODUCTS OF SPECIAL DIETARY SIGNIFICANCE

Foods for special dietary uses may be divided roughly into two general categories: Those to supply an increased concentration of nutritional factors, such as vitamins, and those to omit or limit one or more nutritional factors, such as carbohydrates for the diabetic or sodium for those who must restrict their sodium intake.

The Food and Drug Administration is obligated to check such products for composition and accurate and informative labeling. At the same time, it recognizes that the vast majority of people have no need for special dietary products and can obtain all their nutritional needs by a balanced diet of the wholesome foods that are abundant in this country. Consequently, the activities of those who attempt to scare the public into buying "health foods" as the only means of adequate nourishment, or for the cure or prevention of disease are discouraged by all available means.

One such promoter was convicted in January 1955, and sentence is still pending. Meanwhile, he has had many experiences with State and city agencies trying to prevent false claims and the illegal practice of medicine during a series of "health lectures."

Prosecution cases have been forwarded to the Department of Justice, against 3 house-to-house salesmen of a vitamin preparation for oral claims beyond those permitted by an injunction order stipulated to by the distributors. These cases have not yet been tried.

There has been a notable increase in the use of vitamin B₆ in multiple vitamin preparations during the year, stimulated, no doubt, by the occurrence of convulsions in babies who had been fed a formula found deficient in B₆.

The interest in the development of commercially prepared foods limiting basic ingredients or seasonings is increasing rapidly. Physicians are prescribing more special diets for the management of certain diseases, and a growing percentage of the public is counting calories in weight control efforts.

Just as the housewife was gaining new freedom in providing normal diets through factory-processed foods, many women found it necessary to do most of the processing of low-sodium foods in the home because the ready-to-eat foods contained more sodium than is normally present in home-prepared foods. To meet this demand, manufacturers began to provide various mixes with a low-sodium content, as well as various unsalted canned foods.

The low-sodium food regulations which went into effect September 29, 1954, provide that products purporting to have a low-sodium content bear label declarations of the sodium present in terms of milligrams per 100 grams of food and per average serving. During the year, seizures were made of beets and soup mix that failed to conform to these labeling requirements, and of spinach, applesauce, and soup mixes that contained more sodium than labeled.

Artificial sweeteners, formerly confined to food for diabetics and others whose sugar intake required control, have recently been used extensively for foods offered for their low-calorie count. The Federal law bans the use of such nonnutritive substances in confectionery products, but permits their use in other unstandardized foods under proper labeling if they are not deleterious and do not conceal inferiority. The only provision in the food standards for canned fruits without sugar is for a water pack, without artificial sweetening. Several packers, operating under temporary permits from the Secretary, have been shipping water-pack canned fruits with artificial sweeteners, and a petition has been filed to have such sweeteners included as optional ingredients in the food standards. At the close of the fiscal year the FDA was awaiting a report from the Food Protection Committee of the National Research Council on further investigations to determine the maximum safe intake levels of one sweetener proposed for use.

Earlier recommendations of the National Research Council established a distinction between special purpose foods and those for normal consumption and its opinion that foods containing artificial sweeteners should be used only by those who must restrict their intake of ordinary sugar.

The Food Protection Committee also submitted recommendations on "Principles and Procedures for Evaluating Chemical Additives in Foods," which will be most useful.

DRUGS AND DEVICES

FDA held numerous conferences with the drug industry and medical specialists during the year to exchange information and views on the safety and appropriate labeling of drug products.

To correct the present paucity and disorder of reports on the untoward effects of drugs encountered by physicians and hospitals, FDA has undertaken a pilot study on voluntary reporting in cooperation with the American Association of Medical Record Librarians, the American Medical Association, and the American Society of Hospital Pharmacists. If this is successful, efforts will be made to extend it to a widespread system of permanent reporting, with the assembled information made available to all interested parties.

Recalls.—Twenty-nine drug and device recalls were supervised by FDA during the year. Eleven of the products involved were below labeled potency and five were nonsterile injectables. Another nonsterile product recalled was an eye solution which was the subject of injury complaints. Three others involved *Rauwolfia* of a species other than the *serpentina* species covered by new-drug applications. Other reasons for recalls were: Marketing without effective new-drug applications, variations from U. S. P. specifications, defective packaging, and untoward reactions when injected. Two devices were recalled—blood donor and intravenous administration sets with mechanical imperfections.

Prescription drug sales.—Illegal sales of prescription drugs were charged in 141 of the 154 drug and device prosecutions instituted during the year. The 142 prosecutions tried during that period on charges of illegal sales included some that were filed in the previous year.

Penalties ranged from nominal fines to \$5,000, the highest fine assessed for any violation of the act during the year; 5 of the 6 jail sentences served were for illegal drug sales.

Two of the latter were imposed on men who issued prescriptions for dangerous drugs but were not licensed to practice medicine. One self-styled practitioner had been operating as a physician and surgeon for 19 years without a license, which had been refused because he could not fulfill educational requirements. He was sentenced to 10 months' imprisonment for sales of barbiturates without prescriptions. Another case involved an Indian octogenarian who had been deprived of his license to practice in Oklahoma because of violations of the Narcotics Act. In 1954, he had been fined, given a 1-year suspended jail sentence, and placed on probation for 5 years for illegal sales of amphetamine. One of the conditions of the probation was

that he cease handling drugs in any form. When he persisted in selling amphetamine despite these conditions, the court committed him to an old soldiers home for the duration of his probation.

In addition to the small minority of pharmacists who disregard their professional obligations, there are peddlers who obtain drugs illegally and sell them promiscuously. For example, one woman who was placed on probation ran a massage parlor and dispensed amphetamine to obese patients as an adjunct to her weight-reducing treatments. Also, she was reported to have been supplying these drugs to airmen on furlough, to enable them to stay awake on long auto trips home. Reports of similar traffic in "lift pills" to truck drivers are under current investigation by FDA inspectors.

Adulterated or misbranded drugs and devices.—Of the remaining 13 prosecutions filed, 9 charged false and misleading curative claims. Other charges were based on faulty composition and failure to bear the labeling required by law.

There is a ready market among gullible persons for new "miracle" drugs and contraptions to cure or alleviate their ailments. Promoters capitalize on this market on the heels of articles appearing in popular magazines, "health" lectures, and other means designed to launch the product and establish its purported virtues so firmly in the minds of purchasers that they will continue their patronage even after regulatory agencies restrict the claims. Although it will always be a problem to eliminate active exploitation in this field, the success of these promotions varies inversely with the time available for enforcement activities.

In September 1954, a prosecution case against the promoter of a diabetes "remedy" was lost on the ground that a 1923 patent containing statements as to the efficacy of the drug for the treatment of diabetes established the validity of similar current claims. The Government had presented the testimony of eminently qualified medical and pharmacological witnesses to the effect that the preparation, a mixture of wild sweet pea and lithium citrate, has no effect in the treatment of diabetes. The decision is being appealed since if it is permitted to stand the public will continue to be exploited by this worthless remedy when there are effective measures available to control the disease, failure to use which will bring disastrous results.

A contempt action against another worthless diabetes remedy promoter, who had continued shipping a weed concoction despite injunction orders, was dropped when the court held that he was mentally incompetent and warned that he would have him committed to a mental institution if he persists in distributing the product.

A number of seizures, followed by a permanent injunction, were initiated to stop shipments of a device consisting of a cabinet fitted

with a sunlamp and shortwave unit and colored slides assembled so that jugs of water could be irradiated. The treated water was recommended for apoplexy, tumors, ulcers, virus infections, and a variety of other serious diseases. State officials assisted materially in developing these cases.

Another device case, in which the defendant received a 90-day jail sentence, was based on false and misleading curative claims for color lamps. The defendant was an itinerant "health" lecturer who claimed that various serious diseases and abnormal conditions are caused by specific colors. He offered other colors shining from his lamp to offset them. For example, "yellow diseases," such as jaundice, diabetes, and consumption, required a green treatment light, while "violet diseases," such as laryngitis, goiter, and heart trouble, needed yellow.

One device not only was promoted by fraudulent claims for breast development but also was potentially dangerous to users. Medical consultants for the firm agreed that it might aggravate incipient cancerous conditions if it were used without competent medical examinations, but it was being promoted through mail-order solicitations and newspaper ads on a nationwide scale. Stocks of the devices were seized, and a permanent injunction was required to stop shipments.

Uranium ore treatment "tunnels," pads, blankets, and other containers for slightly radioactive ore and sand continue to attract sufferers from arthritis. The radioactivity is of too low a degree to have any effect whatsoever on any disease condition. Six seizures were effected against interstate shipments. Other actions were undertaken by State authorities. Some of the blankets and hot water bottles containing the supposedly radioactive material were not for sale but could be leased for \$25 a month. One of the "tunnels" was erected in a treatment building to which arthritics were encouraged to come and sit on ore-upholstered benches, with additional emanations supposedly coming from linings of the floor, walls, and ceiling.

Previous reports have discussed an injunction to restrain misbranded drug shipments from a Texas cancer clinic. Last year the operators of the clinic established a branch in Pennsylvania where a large quantity of its drug supplies were seized. Some, however, were apparently moved before the U. S. marshal arrived, so that the new clinic could continue treating patients until new supplies could be secured from intrastate sources. The seizure is now under contest.

Another injunction, filed in 1954, also required continuing attention. It involved an elaborate sales promotion scheme, including false foreign addresses, for an inert glandular product misbranded with sex rejuvenation claims. A permanent injunction was granted in November 1954, and a criminal prosecution case is pending.

New Drugs

New-drug applications submitted during the year numbered 606. Of these, and those under study at the close of the previous fiscal year, 433 were allowed to become effective—343 drugs for human use and 90 for veterinary use. In addition, 2,277 supplemental applications went into effect, of which 1,163 were for veterinary preparations.

Some of the important drugs considered during the year were preparations for the treatment of arthritis, allergic conditions, tuberculosis, and skin conditions; radioactive agents; nonbarbiturate hypnotics; antitussive agents; antibiotics, such as mycostatin and anisomycin; anticholinesterase agents; nonmercurial diuretics; blood volume expanders; ganglionic blocking agents; anesthetics; and growth promotion agents in animals, such as diethylstilbestrol.

COSMETICS AND COLORS

Two cosmetic preparations were recalled because of a dangerously high carbon tetrachloride content that would endanger users through inhalation and skin absorption. Both were intended as rapid driers, one for nail polish and the other for hair following shampoos. Four shipments of the latter were seized.

Other products recalled from consumer channels were a shampoo that exploded on dealers' shelves because of a highly chlorinated water used in diluting its hydrogen peroxide content, and a hair dressing containing an uncertified coal-tar color.

Two shipments of coal-tar colors were seized which were destined for food use but had not been certified for that purpose. The four colors in one lot were falsely labeled "U. S. Certified Food Colors."

CERTIFICATION SERVICES

Coal-tar colors.—All coal-tar colors used in foods, drugs, and cosmetics (except hair dyes) must be from batches certified as harmless by FDA. In 1955, 4,655 batches, representing 5,140,202 pounds, were certified, and 20 batches, representing 13,144 pounds, rejected.

Insulin.—The act provides for predistribution testing and certification of all batches of insulin marketed. Examination of 330 samples resulted in the certification of 286 batches of insulin and 43 batches of materials for use in making insulin-containing drugs. One trial batch of NPH insulin was not approved because it contained excess protamine.

Antibiotics.—The predistribution testing and certification of certain antibiotics is also provided by amendments to the act. Examinations were made of 20,728 batches of penicillin, dihydrostreptomycin, tetracycline, bacitracin, chlortetracycline, streptomycin, and chloram-

phenicol during the fiscal year. Sixty-six batches were rejected for failing to meet the following standards: Potency (25), sterility (21), pyrogens (18), moisture (1), and syringeability (1). In addition, manufacturers withdrew their requests for certification of 19 batches because they failed to meet sterility and other standards.

During this period, 354 amendments and 34 new monographs were added to the antibiotics regulations, reflecting continued scientific research and development in this field.

CHANGES IN THE LAW AND REGULATIONS

Pesticide chemicals.—The Pesticide Chemicals Amendment, which became law on July 22, 1954, was intended to provide a simplified, expeditious procedure for establishing safe tolerances for pesticide chemicals which are useful in agriculture. It was scheduled to become fully effective in 1 year with regard to chemicals for which tolerances had not been established, unless conditions existed which necessitated an extension. If so, extensions for specific chemicals were permitted up to an additional 12 months.

Interpretive, procedural, and fee regulations under the amendment were issued in February 1955. In March, tolerances were established for 69 chemicals on which hearings had been held before the enactment of the amendment. These included a number of pesticides not requiring tolerances because they present no foreseeable hazard. Extensions of these tolerances and exemptions to include additional crops (or raw agricultural commodities) will be made under the provisions of the 1954 amendment.

Before a tolerance is set under the new amendment, the Secretary of Agriculture certifies the usefulness of the pesticide for the purposes proposed in a petition for tolerances and gives his opinion of the residues expected to remain on crops following its use; then FDA chemists ascertain that the proposed method of analysis is reasonable and sufficiently accurate, and its pharmacologists determine from the applicant's data on toxicity what residue of the chemical would be without hazard if it remained in the food supply.

During fiscal year 1955, 24 petitions for tolerances or exemptions were received under the new amendment; 18 were filed; 1 was withdrawn without prejudice to a future filing; and 5 were in pending status at the close of the year. One permanent and 3 temporary tolerances had been established. One manufacturer had requested referral of his petition to an advisory committee of experts selected by the National Academy of Sciences.

Because the date on which the law was scheduled to become fully effective fell in the middle of the 1955 growing season, it became apparent that the effective date of the law should be extended for a number of pesticide chemicals until the end of the growing season

or about October 31, 1955, if the health of the consumer would not be endangered. Criteria for judging requests for extension of the effective date were published in the Federal Register, and shortly after the end of the fiscal year, a number of extensions were granted.

Food standards.—This is the first full year of operations under the new procedure for initiating proceedings looking toward the adoption, amendment, or repeal of food standards, prescribed by an amendment to the Federal Food, Drug, and Cosmetic Act on April 15, 1954. No public hearing has been requested.

From the date of enactment to June 30, 1955, 10 petitions were received from interested parties proposing the adoption or amendment of food standards. One proposal was published on the initiative of the Secretary of Health, Education, and Welfare. Four final orders have issued amending standards for tomato catsup, canned vegetables, cheese, and enriched farina. The others are in various stages of consideration. (See "Products of Special Dietary Significance" for comment on proposals for the addition of artificial sweeteners to canned foods.) Experience with the new procedure indicates that it has many advantages over the old.

The whole food-standards formulation program has had to be curtailed because of limitation of funds and no new work was undertaken. Formulation of standards for canned tuna is progressing and the standards may be promulgated under the new standard-making procedures.

Drug regulations.—A regulation issued in November 1954 provides an orderly basis for changing to over-the-counter sales, with appropriate labeling for lay use, of drugs previously limited in new-drug applications to prescriptions sale, when experience in use establishes that they are safe for unrestricted distribution. This regulation became necessary because of the requirement in the Durham-Humphrey Amendment that only drugs that are not safe for unsupervised use by laymen may be labeled with the prescription legend.

NEW COURT INTERPRETATIONS

The U. S. Court of Appeals for the Second Circuit affirmed the conviction of a corporation and its secretary for misbranding butter while it was held for sale after receipt in interstate commerce. The butter had been repacked into cartons labeled "One Pound Net Weight," although the prints each weighed less. The appellate court held that it was not necessary for the Government to prove that the defendants *knew* that the butter they repacked had been shipped interstate or that it was short weight when repacked.

The U. S. Court of Appeals for the Third Circuit upheld a district judge in his refusal to permit defendants to retract a plea of guilty to charges of violating the Food, Drug, and Cosmetic Act. The court

pointed out that the original plea had been not guilty, that against the advice of their counsel, in an unhurried decision, defendants changed their pleas to guilty, and therefore the district court did not abuse its discretion.

In affirming a conviction for illegal dispensing of prescription drugs after shipment in interstate commerce and while they were being held for sale, the U. S. Court of Appeals for the Tenth Circuit held that the method of transportation of the drugs in interstate commerce was immaterial. The evidence showed that the capsules sold by the defendant in Colorado were manufactured in Illinois, and the court held that the inference was inescapable that they had been transported in interstate commerce, and that how they were transported, when, and how the defendant obtained possession of them was immaterial. In the same decision, the court ruled that there had not been entrapment when the inspector called and asked the defendant to sell him the capsules but merely offered an opportunity for defendant to make an illegal sale.

A district court in refusing to permit distribution of seized ultrasonic devices to chiropractors ruled that chiropractors licensed under the laws of California were not authorized to use or direct the use of ultrasonic devices, and that ultrasonic therapy is part of the practice of medicine, but not of chiropractic. After seizure, the claimant had reconditioned the devices mechanically to comply with the act and then moved for a court order permitting him to distribute them to chiropractors.

A district court extended the doctrine that the falsity or misleading character of labeling is to be measured by its significance as read by those to whom the labeling is directed. A corporation and its manager were convicted of shipping in interstate commerce vitamin products accompanied by false and misleading labeling claiming that the product was effective to remedy the feeling of growing old and consequent loss of vitality and strength. The judge, in reaching the decision that the claims in the labeling were "cruelly" false and misleading, stated that the test was not the reaction of the average person reading the label but rather the reaction of those elderly people who "need little more than a vagrant suggestion to lead them to hope in the restorative ministry claimed."

A district court, in interpreting Section 303 (c), which provides exemption from penalty provisions of the Food, Drug, and Cosmetic Act, held that for conviction it was necessary to establish bad faith on the part of the defendants when they received in interstate commerce goods covered by a guaranty. That Government inspectors had notified the defendants of the misbrandings, or that seizures of the product had been made on the defendants' own premises, was not

construed by the judge as sufficient evidence to prove that the defendants had acted in bad faith.

In granting the Government's motion for summary judgment in a seizure action involving a spaghetti product which failed to comply in protein content with the prescribed definition and standard of identity for spaghetti, a district court reaffirmed the principle that the use of qualifying labeling cannot correct deviation from the standard, unless it is in fact an imitation product, labeled and sold as such. On rehearing, the court affirmed its former decision in spite of claimant's argument that the product had a separate identity, since it had been marketed for many years prior to adoption of the standard of identity for spaghetti. The claimant has filed a notice of appeal.

SCIENTIFIC INVESTIGATIONS

All of FDA's scientific studies are applied directly to regulatory activities and the certification services rendered. New products and processing methods require evaluation for long-range safety to consumers. Methods of quantitative analysis must be devised before the toxicological studies of a new substance may be undertaken.

Earlier in this report the use of a toxic chemical on leafy vegetables for which it was not recommended was discussed. To test the samples of frozen vegetables suspected of containing this pesticide, acceptable methods to determine trace quantities had to be devised. By a bioassay test using flies, amounts ranging from 0.12 to 0.98 ppm were found. After chemical separation, the pesticide was identified by paper chromatography.

Definite analytical patterns are beginning to emerge from the studies being conducted on other pesticides. For example, nine of the more common chlorinated organics can be separated into groups because of their stability to acid or alkali. The slower bioassay tests are still required for those where specific chemical methods are not available. Paper chromatographic studies are proving useful, not only for various pesticides but also for rodenticides, artificial sweeteners, chain and ring organic phosphates, the fruit acids, volatile fatty acids, and various fungicides.

Several studies were made of the results of the use of antibiotics in the treatment of diseases in food-producing animals and in feed supplements to promote growth. Methods were developed for the determination of four antibiotics in feed supplements and mixes. One study made of chickens treated with oxytetracycline showed enough retention of the drug in the tissues so that the manufacturer changed the formula. The new product is now under study. Trace amounts of penicillin were found in 11.6 percent of 474 samples of market milk tested.

Other antibiotic studies were made of: Cycloserine, for its value in tuberculosis; combinations of antibiotics with therapeutic vitamins and with certain hormones for topical application; the standardization of penicillinase, an enzyme that destroys penicillin and is useful in sterility testing of penicillin; the correlation between bacteriophage-type and antibiotic resistance of staphylococci; new methods for the assay of polyene antifungal antibiotics; and modification of the assay of penicillin, so that new, highly insoluble salts can be measured chemically.

Considerable variation exists in the therapeutic efficacy of veratrum alkaloids on the market. Methods for the chemical separation of some of these substances were developed, but tests on animals do not correlate well with the actual alkaloid content of the drug. Potency control remains unsolved.

Continuing potency control of insulin and corticotropin, on the other hand, may be maintained at a constant level through the evaluation of new U. S. P. Reference Standards in terms of the old standard.

New or improved chemical methods have been developed for tetracycline, conjugated estrogens, norepinephrine, and nitroglycerine. Paper chromatography is being used increasingly as an analytical tool for drug determinations as well as in the food field, and a new technique for continuing ascending paper chromatography was developed.

Work on the identification of the various species of *Rauwolfia* by histological methods was done during the year and is continuing as new species are being introduced into commercial drug channels. These botanicals, which provide the active ingredients for a number of important drug products used in hypertension and other related diseases, have been involving substitution of other species for *serpentina*, the only one covered by new-drug applications. Colorimetric and chromatographic procedures were developed for determining reserpine, a drug extracted from *Rauwolfia serpentina*.

Special attention was given also to identification of prescription drug tablets to establish proof of interstate origin in illegal sales cases when shipping records are not available.

A continuing pharmacological study of ipecac included in barbiturate preparations to cause emesis before dangerous amounts are ingested showed that amounts of ipecac retained caused pathological changes that preclude its use as a "built-in antidote."

Cutaneous toxicity studies of talcum powders containing 5 to 12 percent of boric acid led to the conclusion that their absorption is in direct proportion to the abrasion of the skin, with no penetration of the intact skin. They are absorbed in toxic quantities by severely burnt skin where weeping serous surfaces are exposed.

Bacteriological investigations included work on sterilization of and efficacy of bacteriostatic agents in various pharmaceuticals, on frozen strawberries, eggs, and precooked foods, on staphylococcus food poisoning, and on methods for detecting Salmonella.

Microanalytical studies on foods continued toward better methods of filth extractions and identification. A method for whole-can testing of cream was put into field use. Chemical methods for the determination of water-insoluble fatty acids and butyric acid were adapted for use in detecting the use of decomposed cream in butter.

A diagnostic method was developed which is effective for visually detecting moniliasis in live chickens and turkeys with a Pan-Endoscope. Before this development, accurate diagnosis could be made only by post-mortem examination of test birds. Using this new method, controlled experiments have been developed to establish that copper sulfate is worthless at any safe concentration either as a treatment or preventive of moniliasis. Other tests were conducted on veterinary products recommended as anthelmintics, coccidiostats, coccidiosis treatments, internal treatments for external parasites, and turkey histomoniasis (blackhead) preventives and treatments.

Enforcement of Other Acts

A total of 96,798,446 pounds of tea was examined under the Tea Importation Act, in contrast with totals of approximately 124 million in the fiscal year 1954 and 102 million in 1953. Rejections for failure to measure up to the standards set by the U. S. Board of Tea Experts totaled 132,283 pounds, or 0.14 percent. Four rejections were appealed to the U. S. Board of Tea Appeals, which upheld the decision of the FDA examiner in each case.

Five caustic poisons were seized for failure to bear the labeling required to warn users of their potential danger if misused. Included were drain, radiator, pipe, and toilet bowl cleaners.

Two permits were issued for importations of milk from Canada. No violations of the Filled Milk Act were encountered.

Enforcement Statistics

The 11,161 establishment inspections conducted by FDA were divided into 8,900 for foods, 1,901 for drugs and devices, 282 for cosmetics and colors, and 78 for miscellaneous products and items covered by other acts. Of 19,469 samples collected, 10,697 were foods, 8,259 drugs and devices, 400 cosmetics, and 113 miscellaneous.

In the 275 criminal actions terminated (or terminated for some defendants) in the Federal courts during 1955, the fines paid, or

assessed in cases pending on appeal, totaled \$160,403.80. The heaviest fine in a single case was \$5,000. In 50 actions the fines were \$1,000 or more. Jail sentences were imposed in 21 cases involving 24 individual defendants. The sentences ranged from 3 days to 45 months and averaged about 11 months. Six individuals were required to serve the imposed sentences, and for 18 individuals the jail sentences were suspended, on condition that violative practices be discontinued.

Records of actions terminated in the Federal courts were published in 1,440 notices of judgment issued during the year.

Table 2.—Number of samples on which criminal prosecutions and seizures were based and number of court actions instituted during the fiscal year 1955

Item	Total		Criminal prosecutions instituted		Seizures accomplished		Injunctions requested
	Violative samples	Actions	Violative samples	Actions	Violative samples	Actions	
Total.....	2, 676	1, 307	1, 079	248	1, 597	1, 049	10
Foods.....	1, 583	965	302	94	1, 281	868	3
Drugs and devices.....	1, 076	331	777	154	299	170	7
Cosmetics and colors.....	11	6	0	0	11	6	0
Caustic poisons.....	6	5	0	0	6	5	0

Table 3.—Import inspections and detentions during the fiscal year 1955

Item	Total	Inspected and refused entry	Inspected and released
Total.....	24, 151	6, 167	17, 984
Foods.....	21, 077	3, 626	17, 451
Drugs and devices.....	2, 991	2, 515	476
Cosmetics, colors, and miscellaneous.....	83	26	57

Office of Vocational Rehabilitation

Fiscal 1955: The Battle Against Disability Gains Momentum

FISCAL YEAR 1955 was the first year of operation of the State-Federal vocational rehabilitation program under the mandate set forth by Congress in Public Law 565 dated August 3, 1954.¹ It was the first year of a new era in vocational rehabilitation—of an expanded and intensified attack against disability.

To a great extent, 1955 was a year of tooling up for the expanded program called for by P. L. 565. But it was also a year of genuine progress both in the rehabilitation of the handicapped and in the development of public awareness of the problems posed by disability.

Nineteen hundred and fifty-five saw the reversal of a 3-year down-trend in the number of handicapped persons returned to productive work through the public vocational rehabilitation program. It saw the inauguration or expansion of numerous facilities for service to the disabled. It saw a number of basic research and demonstration projects launched—projects dedicated to the study of disability problems of nationwide concern.

It saw educational institutions throughout the nation collaborating wholeheartedly with the Office of Vocational Rehabilitation and with associated State agencies in a drive to remedy the drastic shortages of trained personnel in the rehabilitation field.

BASIC INGREDIENTS AND OBJECTIVES OF PUBLIC LAW 565

Public Law 565 represented the greatest legislative impetus ever given the public vocational rehabilitation program since the inception

¹ Unless otherwise indicated in the text, all subsequent references to 1955 will be to the fiscal year—that is, to the period between July 1, 1954, and June 30, 1955, inclusive.

of the existing State-Federal partnership. The law gave the Federal Office and the 88 State agencies which make up that partnership the most powerful weapons they have ever had to cope with the awesome problem of disability.

In the post-World War II period, the public program has returned more than half a million handicapped people to productive work, an average of about 56,000 per year. However, it is estimated that some 250,000 Americans come to need vocational rehabilitation annually. The gap between those who are receiving vocational rehabilitation services and those who need them is a large one.

Public Law 565 was designed to close that gap. It was enacted with the understanding that the task would require time, great effort, and maximum cooperation between public and private organizations concerned with the welfare of the handicapped. It was enacted in awareness of the terrible toll disability has been exacting from America both in terms of human dignity and of concrete material loss.

The law's avowed aim is to assist "the States in rehabilitating physically handicapped individuals so that they may prepare for and engage in remunerative employment to the extent of their capabilities, thereby increasing not only their social and economic well-being but also the productive capacity of the Nation . . ."

Public Law 565 authorized \$30 million for Federal grants-in-aid for 1955, \$45 million for 1956, \$55 million for 1957, \$65 million for 1958, and such sums as the Congress may decide upon for each succeeding year. The amounts actually appropriated are determined annually by the Congress. For example, \$27.9 million was appropriated for grants to the States and other agencies in 1955 and \$35,825,000 for these purposes in 1956.

Public Law 565 authorizes the use of Federal funds for the training of doctors, nurses, rehabilitation counselors, physical therapists, occupational therapists, social workers, and other specialists to meet the personnel needs of the expanded rehabilitation program. It encourages co-operation between public and private agencies at all levels—Nation, State, and community—with a view to co-ordinating the all-out drive against disability.

The 1954 legislation set up a new three-way grant system composed of *basic support*, *extension and improvement*, and *special project* grants. The basic support grants, which account for the great bulk of the grant money, are designed to help the States meet the costs of administering their basic vocational rehabilitation programs. Federal funds for basic support are allocated in keeping with a legislative formula which takes into consideration State population, per capita income and other factors.

Each State is called upon to provide a specified sum—a sum determined in keeping with the aforementioned legislative formula—to

match the Federal basic support funds allotted to it. If a State does not provide the full sum specified, Federal law requires that its basic support grant be reduced accordingly.

Extension and improvement grants are made to the States for extending and improving services to the disabled. Here, again, the Federal grant must be matched in a specified ratio by the recipient. Federal extension and improvement funds have gone into such projects as the extension of services to the mentally ill, the setting up of programs for working with the rural blind, and the improvement of supervisory, consultative and casework methods in use by State agencies.

The third type of grant—that for special projects—is dedicated to two objectives: (1) to pay part of the cost of research, demonstration or training projects which hold promise of making a substantial contribution to the solution of vocational rehabilitation problems that are common to several States and (2) to aid in a substantial nationwide expansion of rehabilitation programs in the States.

HIGHLIGHTS OF 1955

The number of persons rehabilitated through the public vocational rehabilitation program during 1955 was 57,981, a 4 percent increase over the preceding year. This represented the reversal of a 3-year downtrend.

Total expenditures for the public vocational rehabilitation program during 1955 amounted to \$40,752,809. Of this total, \$25,462,214 was spent by the Federal government, the remainder by State agencies and cooperating nonprofit organizations.

Those rehabilitated during 1955 are now paying Federal income taxes at the estimated rate of \$8.5 million per year. At this rate, they will repay the equivalent of the entire Federal investment in their rehabilitation within three years.

Those rehabilitated during 1955 increased their combined annual earnings from an estimated \$15 million prior to their rehabilitation to an estimated annual rate of \$105 million afterwards.

The 1955 rehabilitees are adding about 89 million man-hours of production to the national economy each year.

The average cost per individual rehabilitated through the State-Federal program during 1955 was \$666.

During 1955, the Office granted \$299,000 for 18 special research projects being conducted by public or private nonprofit organizations for the purpose of solving rehabilitation problems of nationwide significance.

The Office made grants to 91 teaching institutions which had arranged their curricula and plans to co-operate in the training of badly-needed rehabilitation specialists. Federal funds also went to provide traineeship grants for more than 1,000 qualified students in fields such as physical therapy, occupational therapy, medicine, social work, rehabilitation counseling and psychology.

Forty percent of the \$22,300,000 spent by the public program for the purchase of services for handicapped clients during 1955 was spent in the field of medicine—for such things as examinations, treatment, prosthetic appliances, and hospital and convalescent care.

The Rehabilitated: Some Facts and Figures

CHARACTERISTICS OF THE DISABLED

Among the men and women rehabilitated through the State-Federal vocational rehabilitation program during 1955 were those with virtually every type of physical impairment. The eight broad categories of disability represented among the rehabilitants are shown in Chart I, p. 185.

The orthopedically disabled accounted for 40 percent of the total number rehabilitated. About three-fifths of the persons with orthopedic disabilities were injured in accidents, and about one-fifth became disabled as the result of poliomyelitis, arthritis, or osteomyelitis.

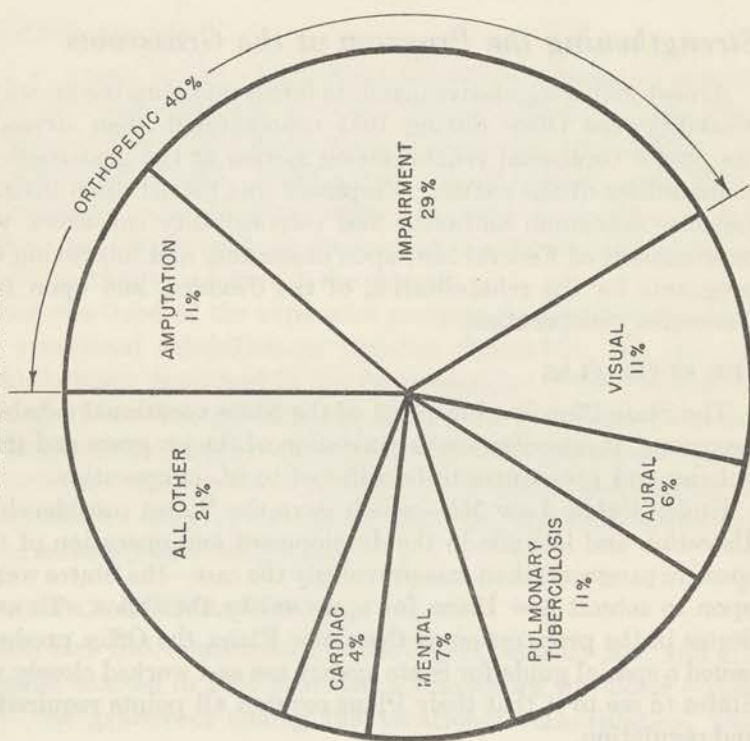
Chart I also shows the major vocational fields which the rehabilitants entered. The distribution of the rehabilitants as to vocation has not changed significantly over the past several years. It is interesting to note that only 6 percent of those rehabilitated were in the unskilled category.

Physicians, health agencies, and hospitals continued to be the most important sources of referrals, such referrals accounting for 34 percent of those rehabilitated through the public program in 1955. Fifteen percent of those rehabilitated during the year were referred by public welfare agencies.

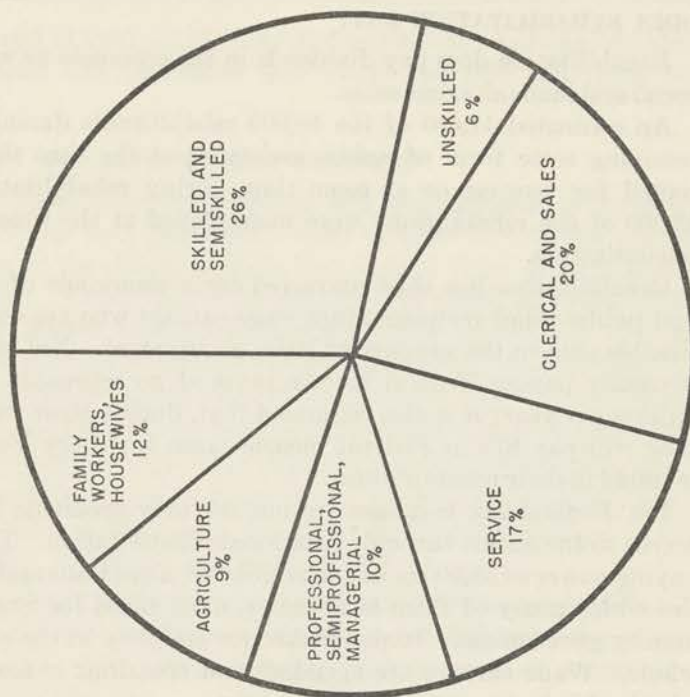
All of those rehabilitated received counseling and guidance services and most were placed in gainful employment through the rehabilitation program. Forty-three percent were provided with physical restoration services and 31 percent were given some sort of training. Ten percent received both physical restoration and training services.

Chart 1.—DISABILITIES AND MAJOR OCCUPATIONAL GROUPS
 Percent of rehabilitants, by types of disability at acceptance and by major occupational group at closure, fiscal year 1955

DISABILITIES



MAJOR OCCUPATIONS



DOES REHABILITATION PAY?

Rehabilitation does pay dividends in the economic as well as in the social and humanitarian sense.

An estimated 11,600 of the 58,000 rehabilitants during 1955 were receiving some form of public assistance at the time they were accepted for services or at some time during rehabilitation. About 43,000 of the rehabilitants were unemployed at the time they began rehabilitation.

Rehabilitation has thus converted these thousands of unemployed and public relief recipients into wage-earners who are contributing a sizeable sum to the support of their government. Not only are they currently paying Federal income taxes at an estimated rate of \$8.5 million per year; it is also estimated that, during their working lives, they will pay \$10 in Federal income taxes for every Federal dollar invested in their rehabilitation.

But Federal tax revenues are not the only economic benefits that accrue to the nation through vocational rehabilitation. The increased buying power of 58,000 newly rehabilitated Americans and of the families which many of them head means more taxes for State and community government. It also makes for stability in the economy as a whole. Wage earners are spenders and spending is essential if the wheels of industry are to be kept moving.

Strengthening the Program at the Grassroots

Armed with a legislative mandate for stepping up the attack against disability, the Office during 1955 concentrated upon strengthening the public vocational rehabilitation system at the grassroots—in the communities of the nation. Emphasis was placed upon giving State agencies maximum authority and responsibility consistent with the requirements of Federal law, upon expanding and improving existing programs for the rehabilitation of the disabled, and upon fostering interagency cooperation.

THE STATE PLAN

The State Plan is a blueprint of the State vocational rehabilitation program. It describes the organization of the program and the major policies and procedures to be adhered to in its operation.

Under Public Law 565—which gave the States considerably more discretion and latitude in the development and operation of their respective programs than was previously the case—the States were called upon to submit new Plans for approval by the Office. To assist the States in the preparation of these new Plans, the Office produced and issued a special guide for State agency use and worked closely with the States to see to it that their Plans covered all points required by law and regulation.

By the end of 1955, all 88 State and territorial vocational rehabilitation agencies had submitted new Plans and had had those Plans approved.

EXTENSION AND IMPROVEMENT PROJECTS

During fiscal 1955, 70 extension and improvement projects in 33 different States were approved. Such projects involve the providing of services to the disabled above and beyond those already available in the State. About half of the projects for which extension and improvement grants were made had to do with specialized counseling services or specialized programs for facilitating the rehabilitation of seriously disabled persons such as the mentally ill and the epileptic.

About one-fourth of the projects were concerned with the improvement of medical consultation and supervisory methods and techniques, the development of organized programs for demonstrating the employment potential of the disabled, and research into techniques to aid in the rehabilitation of the seriously disabled.

The remainder of the extension and improvement projects involved the establishment of sheltered workshops, rehabilitation facilities and other activities designed to improve various types of programs and services to the disabled.

EXPANSION GRANTS

The expansion grant, which is dedicated to a substantial expansion of the nationwide services available to the civilian handicapped, played an important role in the Federal-State vocational rehabilitation program during fiscal 1955. During that year, 60 projects were initiated in 38 States for which Federal expansion grant funds were provided. Funds were made available on the basis of two Federal dollars for each State or local dollar involved in the project.

About one-third of the expansion projects were undertaken by the State vocational rehabilitation agencies themselves, the remaining two-thirds being developed by the State agencies in co-operation with voluntary nonprofit organizations. Thirty of the projects related to the establishment or expansion of sheltered workshops and rehabilitation facilities. Among these facilities were speech and hearing centers, adjustment training centers for the blind, and facilities for other types of seriously disabled persons.

INTERAGENCY COOPERATION

Public Law 565, amendments to the Social Security Act, and allied legislation enacted in 1954 provided a framework for closer cooperation at the grassroots among the vocational rehabilitation, public

assistance, and old-age and survivors insurance programs. Such cooperation made itself felt in a very concrete manner during 1955.

The social security amendments brought into being the "disability freeze" program which—as of June 1955—saw more than 60,000 persons referred to State vocational rehabilitation agencies by district offices of the Bureau of Old-Age and Survivors Insurance.

The "disability freeze" is designed to protect the benefit rights of persons in employment covered by the social security law who are unemployed over a long period of time because of disability. State and territorial vocational rehabilitation agencies play a two-fold role in the "disability freeze" process. They determine whether or not an applicant for "freeze protection" has a disability which qualifies him for such protection. Secondly, they seek to rehabilitate the applicant if he desires rehabilitation services and is eligible for such services.

As of June 1955, working agreements between Old-Age and Survivors Insurance and State vocational rehabilitation agency offices had been completed in 33 jurisdictions. And vocational rehabilitation agencies in 46 States or territories had been designated to make or share in the making of "disability freeze" determinations.

The Office has sought to foster the same sort of cooperative relationship with public assistance program officials as it has with those of the old-age and survivors insurance program. It has made funds available to conduct surveys in selected areas with a view to determining how many of those on public assistance might be helped by vocational rehabilitation.

Working with representatives of the State vocational rehabilitation agencies and of the State public assistance programs, members of the Office and Bureau of Public Assistance staffs prepared a guide designed to foster the best possible cooperative relationship between the State vocational rehabilitation and public assistance programs. The guide was scheduled for release during 1956.

Special Projects: Research and Demonstration

Public Law 565 made it possible to launch a number of pioneering research projects into disability problems of nationwide significance. The first major step into research of this nature was taken in January 1955, when the Secretary of Health, Education, and Welfare announced the appointment of a 12-member National Advisory Council on Vocational Rehabilitation. Mary E. Switzer, Director of the Office of Vocational Rehabilitation, was named chairman of the Council. The Council's purpose—as set forth by law—is to make recommendations on applications for Federal grants in partial support of research and demonstration projects which show promise of contrib-

uting to solution of a vocational rehabilitation problem of concern to a number of States.

During the period between its inauguration and the close of the 1955 fiscal year, the Council considered a total of 46 applications for special project grants. The Council recommended approval of 22 of these applications, disapproval of 17 and, as of June 1955, had deferred action on 4 others pending the receipt of further information. Federal funds awarded during 1955 for special research and demonstration projects totaled approximately \$299,000. The recipient organizations provided at least one dollar for each two dollars in Federal funds awarded.

APPROVED RESEARCH AND DEMONSTRATION PROJECTS

Of the 22 applications for Federal special project grants recommended for approval by the Advisory Council, there were 18 for which funds were actually awarded during 1955. Following are the organizations to which special project grants were awarded, the Federal sums awarded, and a brief description of each project:

Association for the Help of Retarded Children, New York City; \$48,700 for determining the effectiveness of rehabilitation training in fitting mentally retarded young adults, who cannot be helped by other means, to become employable.

New York State Psychiatric Institute, New York City; \$27,823 for establishing and conducting a mental hygiene clinic for the deaf, the purpose of which is to help the deaf to overcome their work and social handicaps.

Georgia Division of Vocational Rehabilitation, Atlanta; \$15,756 for study and development of employment opportunities for blind persons in greenhouses and nurseries.

Federal Employment and Guidance Service, New York City; \$9,399 for study of employer policies and practices in hiring handicapped workers.

Division of Services for the Blind, Topeka, Kansas; \$6,519 for evaluation of the effectiveness of music therapy as a part of an overall program for rehabilitating the blind.

National Rehabilitation Association, Washington, D. C.; \$18,770 for study of functions and training needs of vocational rehabilitation counselors and the development of an accrediting system under which needed training may be offered.

American Foundation for the Blind, New York City; \$10,019 for a survey of professional and administrative personnel in work with the blind with a view to improving standards.

Saranac Lake Rehabilitation Guild, Inc., Saranac Lake, N. Y.; \$10,800 for a survey of the rehabilitation needs of disabled persons in rural areas.

National Industries for the Blind, New York City; \$16,000 for development of a demonstration program of industrial homework for shut-ins in a rural area (the State of Vermont).

University of Pennsylvania, Philadelphia; \$26,568 to conduct a pilot program in speech and hearing rehabilitation in connection with an existing rehabilitation center.

Adelphi College, Garden City, New York; \$20,320 to study handicapped workers who are or who have been associated in some way with two industrial plants on Long Island with a view to determining the importance of some social factors in job placement and community life of the handicapped.

Anderson Orthopedic Hospital, Arlington, Virginia; \$5,000 to plan a program of services for a national pilot demonstration center in the metropolitan Washington, D. C. area.

University of Connecticut, Storrs, Connecticut; \$15,000 for determining the problems encountered in child-care and family relations by mothers with orthopedic handicaps and to develop work simplification methods for performing activities involved in caring for children.

Idaho State Department of Health, Boise, Idaho; \$6,500 for determining the extent of physical disability of vocational rehabilitation significance among seasonal workers migrating annually from the Southwestern United States to the Snake River Valley.

The John Tracy Clinic, Los Angeles, California; \$14,500 for studying the intellectual and personality factors associated with success in lip reading.

George Washington University, Washington, D. C.; \$2,851 for a survey of the metropolitan Washington area to determine the type of pilot rehabilitation center which would best serve as a model for the Nation.

Institute for Crippled and Disabled, New York, N. Y.; \$17,716 for the purpose of developing an evaluation and work classification system for cerebral palsied adults.

Attending Staff Association of the Los Angeles County Hospital, Inc., Los Angeles, California; \$26,719 to explore the vocational rehabilitation potential of respiratory and nonrespiratory poliomyelitis patients.

The Training Program

The Office's training program, inaugurated at the beginning of the year, is designed to train "short-supply" personnel for work in the rehabilitation field, to improve the knowledge and skills of professional personnel already in the field, and to develop an increased awareness of rehabilitation philosophy and methods among personnel in related fields.

By June, 1955, 80 Federal grants for the teaching of rehabilitation subjects had gone to institutions and organizations throughout the country. These grants totaled \$536,000. In addition, about \$254,000 in grant funds were made available for 1,074 long and short-term traineeships in priority occupational fields. Funds were also granted for the holding of 37 workshops and institutes—short-term training sessions in such fields as nursing, physical therapy, occupational therapy, rehabilitation center direction, work for the blind, speech therapy, rehabilitation counseling, and social work.

Among the fields in which teaching grants were awarded were social work, rehabilitation counseling, occupational therapy, physical therapy, rehabilitation center administration, public health, supervision of vending stand operations, clinical psychology, teaching of blind piano tuners, rehabilitation of the tuberculous, rehabilitation nursing and the supervision of rehabilitation training facilities.

INTERNATIONAL ASPECTS OF TRAINING

While the Office has been active in fostering the training of badly-needed vocational rehabilitation workers at home, it has not overlooked the need for such workers in those foreign countries which have requested assistance in solving their own rehabilitation problems. Working in co-operation with the State Department, the United Nations and the Foreign Operations Administration, the Office last year planned and supervised the rehabilitation training programs of 100 individuals from 28 different countries.

The foreign trainees enrolled at educational and allied institutions throughout the nation, the Office maintaining constant contact with them and holding itself ready to work out any problems that might arise during the course of training.

The foreign nationals' training program has shown concrete results as those who have participated have returned home to practice what they have learned. In countries like Egypt and the Philippines, for example, former trainees head up the national rehabilitation programs established—to a great extent—through their efforts. In Guatemala, a physician who took training in this country in 1953, directs a rehabilitation center he was instrumental in establishing.

Guidance and the Setting of Rehabilitation Standards

Providing grants-in-aid for the expansion and improvement of rehabilitation facilities in communities throughout the country, helping State agencies to develop effective operational plans upon which to base their rehabilitation programs, training badly-needed specialists in the field of vocational rehabilitation—these are some of the

broad "direct action" activities of the Office of Vocational Rehabilitation in its overall nationwide attack against disability.

Of equal importance, however, are those Office activities which involve consultation, guidance and the setting of standards . . . activities designed to assist the State vocational rehabilitation agencies to meet specific problems of every conceivable type.

GUIDANCE AND STANDARDS: THE SEVERELY DISABLED

The past year was a fruitful one for advances both in delineating the nature of the problems of the severely disabled and in recommending techniques and methods for coping with these problems.

Fifty-four of the 88 State rehabilitation agencies sent representatives to the 8th Annual Guidance, Training, and Placement Workshop sponsored by the Office in Washington, D. C., in June 1955. The Workshop explored the broad range of rehabilitation counseling activities, paying particular attention to improvement of means and methods for evaluating eligibility of applicants for rehabilitation services.

Office specialists concerned with the blind conducted training sessions or helped in the conducting of such sessions for personnel working with the blind in areas throughout the country. Counselors from State vocational rehabilitation agencies as well as from associated voluntary groups were among those in attendance at these conferences—all of them dedicated to fostering higher standards and more "know-how" in dealing with the problems of the blind. Twelve such conferences were held during the year.

During 1955, there were a number of significant developments in the very complex field of hearing impairment. The Office cooperated with the American Hearing Society in the development of a workshop on community organization for attack on the problems of the hard-of-hearing and the deaf. More than 200 hearing specialists from all over the Nation participated.

One of the important projects for assessing the problem of the "shut-in" whose disability prohibits his leaving his home environment—was a survey which resulted in publication of the report: *The Study of Programs for Homebound Handicapped Individuals*. The report, which was made to Congress, was prepared by the Office in collaboration with the Social Security Administration, the Office of Education, the Public Health Service, and the American Printing House for the Blind.

Stimulating Employment for the Handicapped

Employment is, of course, the end product of the vocational rehabilitation process. During 1955, the Office greatly expanded its

efforts to help State vocational rehabilitation agencies and interested private organizations to foster the placement of the handicapped.

THE EDUCATIONAL CAMPAIGN

Considerable emphasis was placed upon educating the public in general and the employer in particular as to the abilities of the handicapped if placed in the right job. This emphasis was fully in keeping with Public Law 565 which provides that the Secretary of Health, Education, and Welfare, the Secretary of Labor, and the Chairman of the President's Committee on Employment of the Physically Handicapped "shall develop and recommend methods which will assure maximum utilization of services . . . in promoting job opportunities for such individuals." As the representative of the Secretary of Health, Education, and Welfare, the Office has cooperated fully with all governmental departments in this great educational effort—an effort which has been continued on a sustained year-around basis.

Grassroots promotional efforts—both in keeping with P. L. 565 and with earlier legislation—have actually been brought to bear by joint effort in communities throughout the country: Governor's Committees on Employment of the Physically Handicapped, the State vocational rehabilitation agencies, State public employment service offices, veterans employment service representatives of the Department of Labor—all of these have been and are working together to foster the employment of the handicapped and an understanding of their problems.

But the educational campaign to foster employment of the handicapped has not only concentrated upon broad, promotional objectives but also upon providing immediate, specialized assistance to placement specialists concerned with the handicapped. Examples of this type of assistance are numerous. One such was the issuance by the Office of a publication entitled *Small Business Enterprises for the Severely Handicapped*, which is now in wide use. Another is the work being done by the Office in surveying industries throughout the country with a view to obtaining information which will help the blind to secure employment and then making the results of such surveys available to the public in general and the blind in particular.

THE VENDING STAND PROGRAM

The Vending Stand Program for the Blind, one of the most important media through which employment opportunities have been developed for the blind, continued to have healthy growth during the year. Future years hold promise of even greater expansion because of the 1954 amendments to the Randolph-Sheppard Act, the law under which the program operates.

Reports from all States showed that a record 1,721 blind vending stand operators were employed on June 30, 1955, as compared to 1,659

at the end of the preceding year. The blind operators had a net average income of \$2,300 during the past year, an increase of more than \$100 a year per operator.

The operators and their employees earned \$5.3 million in the year ending June 30, 1955, an increase of \$500,000 over the preceding year. Gross vending stand sales were \$23.5 million as compared to approximately \$22 million the preceding year.

Much progress was made during the year in implementing the amendments to the Randolph-Sheppard Act. The amended Act provides for preference to blind persons in the operation of vending stands on Federal property as well as in Federal buildings, and requires that the head of each agency in control of Federal property prescribe regulations to assure preference for licensed blind persons in the operation of vending stands on such property.

The preference regulations for property under the control of the Department of Health, Education, and Welfare were developed and issued, and the Office provided consultation to officials of a number of other departments and agencies to assist them in the development of their preference regulations.

Regulations governing the operation of the program by the State licensing agencies were developed and issued and guide materials were prepared to assist the State agencies in developing new application forms (for licenses) and new State rules and regulations.

OTHER PLACEMENT ENTERPRISES

The Office has worked steadily with the U. S. Civil Service Commission in promoting job opportunities for the handicapped in the public service. Promotional and information materials relative to the handicapped have been sent to the approximately 15,000 appointing officers of the Federal establishments.

State vocational rehabilitation agencies are also working closely with public employment service offices throughout the country in the placement of the handicapped. Most public employment agencies maintain selective placement services designed to help the handicapped find suitable jobs.

Advances in the Field of Medicine and Physical Restoration

Nineteen hundred and fifty-five saw advances both in the medical treatment of the handicapped and in the expansion of medical facilities for service to them. This expansion was carried through under the terms of Public Law 565.

PROGRESS IN AIDING THE MENTALLY ILL

With mental health becoming a problem of increasing concern to the American people, the Office during 1955 played a vital role in the development of plans whereby the relationship between State mental hospitals and vocational rehabilitation agencies could be strengthened. The planning was carried through upon the premise that thousands of mental patients previously doomed to prolonged existence in mental hospitals could and should be restored to a community environment and to productive employment.

During 1955, seven States requested that the Office make funds available for the employment and training of vocational rehabilitation staff to work with the mentally ill. Office personnel rendered consultative services to some of these States and, in addition, co-operated with the National Institutes of Health, the Veterans Administration, voluntary agencies, and mental hospital staff personnel in providing training courses for State agency people concerned with the mentally ill.

Concrete steps were taken to accelerate and improve the rehabilitation of patients in State mental hospitals with the holding of regional workshops in Washington, D. C., in March and April 1955. The March workshop was attended by administrators and administrative personnel from the State vocational rehabilitation agencies, State hospitals, and State health departments in Maryland, the District of Columbia, Virginia, West Virginia, North Carolina, Kentucky, and Puerto Rico. The April workshop was attended by operating personnel from these same agencies.

Cosponsored by the Office, the National Institute of Mental Health, and Saint Elizabeths Hospital, the workshops were devoted to a detailed discussion of common problems relating to establishment of policy for rehabilitating the mentally ill, the allocation of responsibility among the organizations involved in the rehabilitation process, and case management. The success of these workshops was such that three additional regional conferences in the mental health field were scheduled for 1956.

PROGRESS IN OTHER FIELDS OF MEDICINE

The Office placed major emphasis during fiscal 1955 upon strengthening cooperation with the American Heart Association and its affiliates with a view to improving the techniques and methods for rehabilitating persons suffering from heart disease. This cooperative effort has helped to foster the establishment of work classification units in many communities—units which aid the heart patient by evaluating his disability, estimating his work capacity and developing

with him plans for his future work and for meeting the problems of daily life.

The work classification unit is a rehabilitation team generally composed of a cardiologist, a medical social worker, and a vocational counselor. Its operating base may be a community hospital, a Heart Association affiliate or a public agency. The work classification unit is a development of the post-World War II era which has more than proved its effectiveness.

Medical Officers on the Office staff participated in the development of medical standards and policies for use in determining the eligibility of clients for the "disability freeze." (See page 188 for discussion of the "disability freeze" program.) These officers worked with the medical advisory committee of the Social Security Administration and also helped to direct training courses for medical and medically related personnel of the State vocational rehabilitation agencies.

THE DEVELOPMENT OF REHABILITATION FACILITIES

In 1954, Congress amended the hospital survey and construction provisions of the Public Health Service Act of 1946 so that Federal funds could be used to assist in the construction of rehabilitation facilities. Under the terms of the amended law, the Office has collaborated with the Public Health Service in the development of regulations and informational materials as guides to the States in the planning and survey phases of the facility construction program.

As of the end of 1955, eight States had submitted broad, comprehensive plans for the construction of various types of facilities. No specific proposals for construction of *individual* facilities were received during the year. However, the amended law provides that funds for such construction shall remain available during 1956 and it is anticipated that a number of individual project proposals will have been received prior to the end of that year.

International Cooperative Efforts

In addition to its assistance to foreign students pursuing rehabilitation study programs in this country, the Office during 1955 engaged in a number of activities designed to help other countries cope with various disability problems.

During 1955, the Office worked with the Foreign Operations Administration in recruiting rehabilitation specialists for employment in Latin-American countries. Two such specialists were sent abroad on long-term assignments, one to provide services to the tuberculous and the other to provide such services to the blind. The Office also recruited specialists for short-term assignments in Mexico, the purpose

of such assignments being to assist the Mexican government to develop special services to the blind, the deaf, the hard of hearing and amputees.

Office personnel also assisted in the development of consultative and training programs in a number of countries as well as in fostering the expansion of such programs.

The Office played a leading part in the development of the International Recommendation on Vocational Rehabilitation which was unanimously adopted by the International Labor Organization's 38th annual session in June 1955.

In its development of policies and plans for assisting foreign countries to meet their rehabilitation problems, the Office has worked closely with both public and voluntary agencies in the international field. Among such groups are the American Foundation for Overseas Blind, the International Society for Welfare of Cripples, the World Veterans Federation, and the international associations for physical therapy and occupational therapy.

Table 1.—Number of referrals and cases, by agency, fiscal year 1955

[Corrected to September 15, 1955]

Agency ¹	Referrals				Cases				Re- main- ing at end of year ⁵
	During fiscal year			Re- main- ing at end of year ³	During fiscal year				
	Total	Ac- cepted for serv- ices	Not ac- cepted for serv- ices ²		Total active load (receiv- ing serv- ices)	Closed from active load			
						Reha- bilitat- ed	After rehabili- tation plan initiat- ed ⁴	Before rehabili- tation plan initiat- ed ⁴	
United States, total.....	257,521	82,269	81,886	93,366	209,030	57,981	6,441	17,035	127,573
Alabama.....	6,740	2,511	658	3,571	6,897	1,960	202	323	4,412
Alaska.....	113	24	42	47	107	16	23	6	62
Arizona:									
General.....	1,089	290	219	580	639	203	21	15	400
Blind.....	132	41	35	56	110	24	6	1	79
Arkansas.....	4,819	1,531	2,234	1,054	3,884	1,111	131	578	2,064
California.....	20,027	3,426	13,455	3,146	8,312	1,618	569	809	5,316
Colorado:									
General.....	1,841	771	493	577	1,655	457	216	80	902
Blind.....	222	53	10	159	154	21	3	2	128
Connecticut:									
General.....	2,676	1,405	509	762	3,409	801	143	352	2,113
Blind.....	191	90	56	45	160	50	8	0	102
Delaware:									
General.....	1,190	555	405	230	1,234	456	14	81	683
Blind.....	62	37	12	13	64	18	5	3	38
District of Columbia.....	1,791	529	709	553	1,366	302	118	170	776
Florida:									
General.....	7,644	2,301	2,488	2,855	5,519	1,619	216	524	3,160
Blind.....	3,201	331	1,823	1,047	840	240	40	49	511
Georgia.....	20,879	5,003	6,687	9,189	11,866	4,552	262	996	6,056
Hawaii:									
General.....	833	208	307	318	586	159	35	5	387
Blind.....	52	30	7	15	116	24	8	14	70
Idaho:									
General.....	1,329	191	543	595	428	122	20	9	277
Blind.....	44	16	15	13	35	9	4	1	21
Illinois.....	7,998	4,889	1,017	2,092	10,898	3,406	185	598	6,709
Indiana:									
General.....	2,623	1,458	527	638	4,070	941	74	352	2,703
Blind.....	250	85	60	105	251	45	18	10	178
Iowa:									
General.....	3,248	1,039	613	1,596	2,740	651	54	209	1,826
Blind.....	133	19	31	83	66	19	7	1	39
Kansas:									
General.....	3,159	888	991	1,280	1,914	550	40	182	1,142
Blind.....	219	43	60	116	156	30	4	6	116
Kentucky.....	3,452	813	1,035	1,604	2,240	459	64	208	1,509
Louisiana:									
General.....	3,920	1,598	959	1,363	4,766	1,174	84	350	3,158
Blind.....	668	141	205	322	464	91	11	11	351
Maine:									
General.....	1,552	360	289	903	914	198	25	75	616
Blind.....	164	16	88	60	64	18	5	1	40
Maryland.....	3,964	1,924	951	1,089	4,626	1,075	156	761	2,634
Massachusetts:									
General.....	3,241	1,011	1,133	1,097	2,633	717	114	241	1,561
Blind.....	263	84	37	142	254	45	2	14	193
Michigan:									
General.....	6,758	3,062	1,314	2,382	8,447	2,862	374	154	5,057
Blind.....	328	188	82	58	433	116	35	42	240
Minnesota:									
General.....	4,205	897	1,232	2,076	3,367	582	111	98	2,576
Blind.....	342	135	146	61	414	92	15	48	259
Mississippi:									
General.....	2,571	711	860	1,000	2,906	876	76	218	1,736
Blind.....	701	408	186	107	787	202	23	23	539
Missouri:									
General.....	2,764	1,480	719	565	3,112	1,177	110	239	1,586
Blind.....	441	165	155	121	448	113	25	16	294
Montana:									
General.....	1,360	454	374	532	1,086	390	14	22	660
Blind.....	175	17	138	20	67	16	6	11	34
Nebraska:									
General.....	1,049	712	129	208	1,563	518	29	15	1,001
Blind.....	113	30	31	52	92	31	2	0	59
Nevada.....	298	70	93	135	131	46	10	0	75

See footnotes at end of table.

Table 1.—Number of referrals and cases, by agency, fiscal year 1955—Con.

[Corrected to September 15, 1955]

Agency ¹	Referrals				Cases				
	During fiscal year			Re- main- ing at end of year ³	During fiscal year			Re- main- ing at end of year	
	Total	Ac- cepted for serv- ices	Not ac- cepted for serv- ices ²		Total active load (receiv- ing serv- ices)	Closed from active load			
						Reha- bilitated	After rehabil- itation plan initiated ⁴		Before rehabil- itation plan initiated ⁵
New Hampshire:									
General.....	522	220	140	162	425	95	16	68	246
Blind.....	42	24	5	13	75	14	6	8	47
New Jersey:									
General.....	2,484	973	842	669	2,550	619	84	371	1,476
Blind.....	430	132	148	150	471	93	26	35	317
New Mexico:									
General.....	1,065	217	386	462	615	225	17	26	347
Blind.....	151	31	41	79	102	28	17	6	51
New York:									
General.....	14,935	4,921	4,708	5,306	11,885	3,424	356	1,315	6,790
Blind.....	957	356	223	378	805	243	51	59	452
North Carolina:									
General.....	6,782	3,439	1,948	1,395	7,810	2,689	124	545	4,452
Blind.....	914	382	341	191	1,463	306	28	141	988
North Dakota:									
General.....	952	249	179	524	887	173	3	17	394
Ohio:									
General.....	4,820	1,512	1,321	1,987	3,525	1,152	58	209	2,106
Blind.....	442	234	83	125	715	141	38	54	482
Oklahoma:									
General.....	6,164	2,084	2,832	1,248	6,178	1,160	86	549	4,383
Oregon:									
General.....	5,018	1,038	1,730	2,250	2,646	577	63	211	1,795
Blind.....	162	43	51	68	144	34	3	4	103
Pennsylvania:									
General.....	16,058	6,010	4,445	5,603	11,934	3,337	490	987	7,120
Blind.....	1,774	367	692	715	1,269	149	86	197	837
Puerto Rico:									
General.....	4,464	911	1,070	2,483	2,747	814	69	129	1,735
Rhode Island:									
General.....	773	403	244	126	955	307	117	34	497
Blind.....	30	29	0	1	173	25	5	8	135
South Carolina:									
General.....	4,868	1,446	1,549	1,873	4,296	1,313	77	161	2,745
Blind.....	335	112	127	96	252	75	9	41	127
South Dakota:									
General.....	664	178	61	425	704	141	7	15	541
Blind.....	105	19	62	24	61	17	4	6	34
Tennessee:									
General.....	5,075	1,951	1,273	1,851	4,510	1,695	88	200	2,527
Blind.....	756	177	162	417	602	118	13	67	404
Texas:									
General.....	10,177	3,021	2,565	4,591	9,560	2,189	135	820	6,416
Blind.....	1,172	312	368	492	793	267	42	64	420
Utah:									
General.....	1,152	307	232	613	1,080	254	32	19	775
Vermont:									
General.....	767	257	198	312	556	110	31	38	377
Blind.....	45	26	10	9	65	15	2	6	42
Virginia:									
General.....	10,431	3,074	3,841	3,516	6,761	1,821	108	1,051	3,781
Blind.....	364	110	61	193	186	69	4	5	108
Washington:									
General.....	5,915	1,119	1,899	2,897	3,370	860	123	229	2,158
Blind.....	161	36	57	68	169	24	4	44	97
West Virginia:									
General.....	11,116	2,896	2,498	5,722	7,333	1,607	84	1,313	4,329
Wisconsin:									
General.....	3,610	1,388	884	1,338	4,671	1,365	149	50	3,107
Blind.....	167	68	48	51	253	81	44	7	121
Wyoming:									
General.....	868	157	400	311	444	153	25	3	263

¹ In States which have 2 agencies, the agency under the State board of vocational education 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 determined.

⁴ Closed after rehabilitation plan was agreed upon and approved by supervising official; 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; probable increase in degree of disability; loss of contact, etc.

⁶ In process of rehabilitation on June 30, 1955.

⁷ Adjusted.

Table 2.—Federal grants made to State vocational rehabilitation agencies and cooperating nonprofit organizations, fiscal year 1955

State or Territory	Total	Support grants	Extension and improvement grants	Expansion grants ¹
Total.....	\$22,153,088	\$21,242,164	\$347,966	\$562,958
Alabama.....	687,890	643,825	28,636	15,429
Arizona.....	120,708	109,598	7,425	3,685
Arkansas.....	437,238	410,124	17,556	9,558
California.....	1,799,036	1,745,057	—	53,979
Colorado.....	161,608	149,593	6,765	5,250
Connecticut.....	296,351	276,369	—	19,982
Delaware.....	132,088	127,088	5,000	—
Florida.....	629,810	593,315	23,495	13,000
Georgia.....	1,531,419	1,510,262	21,157	—
Idaho.....	53,311	53,311	—	—
Illinois.....	1,274,632	1,237,881	—	36,751
Indiana.....	346,377	341,377	—	5,000
Iowa.....	291,768	291,768	—	—
Kansas.....	206,850	195,784	11,066	—
Kentucky.....	201,376	159,418	27,267	14,691
Louisiana.....	476,474	464,329	—	12,145
Maine.....	82,114	82,114	—	—
Maryland.....	305,001	305,001	—	—
Massachusetts.....	252,403	245,042	7,361	—
Michigan.....	980,708	952,491	18,917	18,300
Minnesota.....	283,615	260,049	—	23,566
Mississippi.....	265,434	265,434	—	—
Missouri.....	494,681	396,080	1,119	97,482
Montana.....	126,419	124,019	—	2,400
Nebraska.....	187,673	173,330	7,743	6,600
Nevada.....	25,346	25,346	—	—
New Hampshire.....	42,073	42,073	—	—
New Jersey.....	386,741	373,156	—	13,585
New Mexico.....	104,581	88,247	—	16,334
New York.....	1,276,835	1,276,835	—	—
North Carolina.....	618,200	618,200	—	—
North Dakota.....	103,049	99,972	—	3,077
Ohio.....	389,750	389,750	—	—
Oklahoma.....	529,175	514,667	14,508	—
Oregon.....	310,218	278,881	11,000	20,337
Pennsylvania.....	1,582,406	1,449,672	37,937	94,797
Rhode Island.....	92,515	86,103	6,412	—
South Carolina.....	417,681	417,681	—	—
South Dakota.....	80,055	69,780	5,475	4,800
Tennessee.....	549,975	545,444	4,531	—
Texas.....	935,325	892,499	26,826	16,000
Utah.....	130,146	121,736	4,773	3,637
Vermont.....	84,138	84,138	—	—
Virginia.....	536,314	509,720	10,200	16,394
Washington.....	478,310	478,310	—	—
West Virginia.....	576,451	540,041	17,813	18,597
Wisconsin.....	496,182	467,032	17,250	11,900
Wyoming.....	86,327	84,811	—	1,516
Alaska.....	45,355	45,355	—	—
Dist. of Columbia.....	233,271	221,371	7,734	4,166
Hawaii.....	131,224	131,224	—	—
Puerto Rico.....	277,461	277,461	—	—

¹ Includes grants to nonprofit organizations for projects developed in cooperation with State vocational rehabilitation agencies.

Table 3.—Federal grants made to State agencies for the blind and cooperating nonprofit organizations, fiscal year 1955

State or Territory	Total	Support grants	Extension and improvement grants	Expansion grants ¹
Total.....	\$3,010,166	\$2,757,780	\$115,083	\$137,303
Arizona.....	29,415	27,365	1,127	923
Colorado.....	37,426	34,178	3,248	-----
Connecticut.....	37,150	30,400	6,750	-----
Delaware.....	35,836	32,836	-----	3,000
Florida.....	194,434	185,484	5,000	3,950
Idaho.....	14,402	14,402	-----	-----
Indiana.....	45,872	44,372	1,500	-----
Iowa.....	21,864	21,864	-----	-----
Kansas.....	71,550	54,299	7,312	9,939
Louisiana.....	84,250	82,106	-----	2,144
Maine.....	25,264	22,064	-----	3,200
Massachusetts.....	67,544	41,767	1,500	24,277
Michigan.....	94,664	94,664	-----	-----
Minnesota.....	66,415	66,415	-----	-----
Mississippi.....	153,258	133,258	16,000	4,000
Missouri.....	113,664	107,270	6,394	-----
Montana.....	20,614	20,614	-----	-----
Nebraska.....	44,855	41,060	3,795	-----
New Hampshire.....	16,154	16,154	-----	-----
New Jersey.....	110,099	107,099	-----	3,000
New Mexico.....	25,221	23,188	-----	2,033
New York.....	265,066	261,129	3,937	-----
North Carolina.....	306,164	265,391	28,773	12,000
Ohio.....	155,650	144,900	-----	10,750
Oregon.....	39,716	39,716	-----	-----
Pennsylvania.....	282,390	272,390	-----	10,000
Rhode Island.....	28,769	28,769	-----	-----
South Carolina.....	45,686	45,686	-----	-----
South Dakota.....	22,628	19,489	1,511	1,628
Tennessee.....	129,555	129,555	-----	-----
Texas.....	236,408	169,772	24,636	42,000
Vermont.....	17,650	15,782	-----	1,868
Virginia.....	36,799	36,799	-----	-----
Washington.....	31,434	31,434	-----	-----
Wisconsin.....	71,846	68,246	3,600	-----
Hawaii.....	30,454	27,863	-----	2,591

¹ Includes grants to nonprofit organizations for projects developed in cooperation with State Commissions or agencies for the blind.

TABLE 1. Summary of the model results for the 1990–2000 period. The table shows the mean and standard deviation of the monthly precipitation (mm) and the number of days with precipitation (days) for each month and for the entire year. The data are presented for the 1990–2000 period and for the 1990–2000 period.

Month	Mean (mm)	Std. Dev. (mm)	Mean (days)	Std. Dev. (days)
Jan	10.5	1.2	1.5	0.5
Feb	11.2	1.3	1.6	0.5
Mar	12.8	1.4	1.8	0.6
Apr	14.5	1.5	2.0	0.7
May	16.2	1.6	2.2	0.8
Jun	18.0	1.7	2.4	0.9
Jul	19.5	1.8	2.6	1.0
Aug	20.8	1.9	2.8	1.1
Sep	21.5	2.0	3.0	1.2
Oct	22.2	2.1	3.2	1.3
Nov	21.8	2.0	3.1	1.2
Dec	20.5	1.9	2.9	1.1
Year	18.5	1.8	2.5	0.9

TABLE 2. Summary of the model results for the 1990–2000 period. The table shows the mean and standard deviation of the monthly precipitation (mm) and the number of days with precipitation (days) for each month and for the entire year. The data are presented for the 1990–2000 period and for the 1990–2000 period.

Month	Mean (mm)	Std. Dev. (mm)	Mean (days)	Std. Dev. (days)
Jan	10.5	1.2	1.5	0.5
Feb	11.2	1.3	1.6	0.5
Mar	12.8	1.4	1.8	0.6
Apr	14.5	1.5	2.0	0.7
May	16.2	1.6	2.2	0.8
Jun	18.0	1.7	2.4	0.9
Jul	19.5	1.8	2.6	1.0
Aug	20.8	1.9	2.8	1.1
Sep	21.5	2.0	3.0	1.2
Oct	22.2	2.1	3.2	1.3
Nov	21.8	2.0	3.1	1.2
Dec	20.5	1.9	2.9	1.1
Year	18.5	1.8	2.5	0.9

TABLE 3. Summary of the model results for the 1990–2000 period. The table shows the mean and standard deviation of the monthly precipitation (mm) and the number of days with precipitation (days) for each month and for the entire year. The data are presented for the 1990–2000 period and for the 1990–2000 period.

Month	Mean (mm)	Std. Dev. (mm)	Mean (days)	Std. Dev. (days)
Jan	10.5	1.2	1.5	0.5
Feb	11.2	1.3	1.6	0.5
Mar	12.8	1.4	1.8	0.6
Apr	14.5	1.5	2.0	0.7
May	16.2	1.6	2.2	0.8
Jun	18.0	1.7	2.4	0.9
Jul	19.5	1.8	2.6	1.0
Aug	20.8	1.9	2.8	1.1
Sep	21.5	2.0	3.0	1.2
Oct	22.2	2.1	3.2	1.3
Nov	21.8	2.0	3.1	1.2
Dec	20.5	1.9	2.9	1.1
Year	18.5	1.8	2.5	0.9

Saint Elizabeths Hospital

DURING THE YEAR just past there has been no essential change in the organization of the structure of the hospital. The medical care is assigned to the three Clinical Branches and the Medicine and Surgery Branch, the latter of which includes the tuberculosis service. All the other activities of the hospital, such as Social Service, Nursing, Dietetics, Maintenance and Construction, are auxiliary to the work of these four branches.

Before considering the detailed operation of the hospital a few general remarks are in order, particularly in view of the fact that January 15, 1955, marked the One Hundredth Anniversary of the reception of patients at Saint Elizabeths Hospital. The Centennial of any institution is worth remarking, and particularly so in the case of an institution which has meant so much to the Government of the United States and to American psychiatry as Saint Elizabeths Hospital. It was the desire of the hospital administration to carry out a dignified observance of the Centennial, and particularly to pay respect to the memory of the founder of the hospital, Dorothea Lynde Dix. Steps were taken to organize a non-profit Centennial Commission, which was fortunate in securing generous donations from the Ford Foundation, the Smith, Kline, and French Foundation, the Medical Society of Saint Elizabeths Hospital, and from several interested and generous individuals.

A scientific program of two days was held in May. Papers were read and greetings were brought by distinguished psychiatrists, both from the United States and from six foreign countries, several of them former members of the staff. The scientific contributions were of a high order, and plans are being made to publish them in an anniversary volume. In connection with the scientific program the patients wrote and acted an historical drama, entitled "Cry of Humanity", based on the life of Dorothea Lynde Dix. They likewise devised and built the

stage sets and planned the choreography. The play received a great deal of public attention from dramatic critics, and a portion of it was shown on a coast-to-coast television program. A radio broadcast of the Town Meeting of the Air likewise was held at the hospital; numerous articles concerning the work of the hospital have appeared in newspapers and in various periodicals. During the calendar year it is also planned to dedicate the new admission-treatment building, which is to be known as the Dorothea Lynde Dix Pavilion, and the new chapel, construction of which is now under way.

Several new steps have been taken in the care of patients. Various group meetings have been encouraged, involving patients and personnel, which are designed to stimulate social interaction. In line with the growing recognition of the function of the mental hospital as a "therapeutic community," studies of the interrelationships of staff, personnel and patients have been undertaken during the year by a social scientist. These studies should cast further light on what may be termed the play of social forces within the hospital, and nature of their helpful influence on the patient. A greater degree of responsibility has been developed in the patients by group administrative meetings and various other steps toward a partial self-government. The effects of these steps have been distinctly noticeable, and have proven highly beneficial to the patients.

Another important development in the care of patients has been the introduction of the use of two of the so-called tranquilizing drugs, namely, chlorpromazine and reserpine. These drugs, which have the unusual quality of reducing physical overactivity while at the same time not impairing the consciousness of the patient, have resulted first of all in the patients' greater accessibility to other forms of therapy. The amount of restraint and seclusion have been vastly reduced; patients have become less disturbed and less destructive, and the atmosphere of the so-called disturbed wards has been greatly altered for the better. As yet the discharge rate has not been increased by the use of these drugs, but it is fully expected that an improvement in that regard will be seen as their use becomes more general and more standardized. These drugs are relatively expensive, and this fact has presented certain budgetary problems. There is no question, however, about their value, and it is quite evident that the increased cost is justified.

Another important step during the year was the change in function of the Women's Receiving and Men's Receiving Building which have taken over respectively the admitting functions of West Lodge and Que Services. Patients, both colored and white, are now admitted to these wards, and are cared for in a considerable number of other wards as well. Any difficulties which might have been expected as a result of the intermixture have proved to be largely illusory.

Division of Medical Services

CLINICAL BRANCHES

It is proper to speak once again of the ever present problem of overcrowding, which has now reached the figure of nearly 13 percent above the proper bed capacity of the hospital (6,454 capacity, 7,285 patients in hospital). The number of patients in the institution, despite the various attempts to discharge them promptly, continues to grow and in addition the average age of the patients is increasing. There is thus a growing tendency of the patients to remain in the hospital somewhat longer. Although the addition of new buildings has been noted from time to time, it should be remarked that along with the acquisition of new buildings there has gone the destruction of a corresponding number of beds in older buildings; thus the net gain in beds has been almost negligible. When the Dorothea Lynde Dix Pavilion (the new admission-treatment building) of 420 beds is opened, for example, it is required by the terms of the enabling legislation that two buildings, namely, Toner and Oaks, shall be destroyed. These two buildings together have a present bed capacity of 436; there will, then, be an actual loss of bed-space!

During the year the Geriatric Building was converted to the additional function of admitting new patients over 64 years of age. In addition the one ward which was reported last year as vacant was opened during the year, funds having become available for adequate personnel to bring about this opening.

It still remains necessary to maintain a waiting list for prisoner patients to be admitted to Howard Hall. In fact, at present there are approximately 25 such patients being held in the District of Columbia General Hospital or in the District Jail awaiting transfer. This is a highly undesirable state of affairs. Eventually it will be remedied by the construction of the new Howard Hall, money for planning of which has already been appropriated; the opening of that building, however, is several years in the future.

The difficulty in filling senior staff positions in the hospital continues. The positions of resident are kept fairly well filled and some recruiting of staff is possible through this program, but not to a sufficient extent to maintain the senior staff intact in numbers. One difficulty which operates is that another agency of the Government is permitted to pay a premium of 25 percent of the salary to physicians who are diplomates of specialty boards. For several years it has been recommended by this hospital that it be placed on a competitive basis with the other agency mentioned, but as yet no legislative steps have materialized. It certainly does not seem fair that one agency of the Government should be put at a disadvantage in competing with another agency which is doing similar work.

The elderly patient continues to be a serious and a growing problem. Nearly 40 percent of the patients admitted now are 60 years of age or older, and there is every likelihood that this proportion will continue to increase. A substantial number of the older patients in this hospital, although technically suffering from mental illness, are in such favorable condition that they could be cared for in nursing homes or other similar institutions, or in their own homes if their families would undertake their care. Attempts are made to return as many as possible to the community, and as space has permitted some have been transferred to the District of Columbia Village, formerly known as the Home for the Aged and Infirm. The plan of admitting elderly patients directly to the Geriatric Building appears to be working well since its commencement on June 15th. The number of voluntary patients showed a slight drop (92 admissions as against 111 in the previous year).

In the line of treatment, the almost revolutionary effects produced by the so-called tranquilizing drugs have already been noted. In general, the hospital attempts to follow an eclectic approach to the line of treatment and following the hundred-year-old tradition of the hospital is ready to utilize any new methods of treatment which appear to offer help to the patient without incidental harm. An active program of individual psychotherapy is carried on and the program of group therapy is being further developed. Such groups are now widespread in the hospital. The psychodrama program continues active as an adjunct both to therapy and to rehabilitation. The District of Columbia Rehabilitation Service has been most helpful in enabling patients to return to the community, while the Board of Education of the District of Columbia has provided visiting teachers for the younger patients. Recreational therapy has been extended. In selected cases electro-shock, sub-shock insulin, and hydrotherapy continue to be used. There seems to be no reason to think that hydrotherapy has been superseded either by the "tranquilizing" drugs or by electro-shock. Prefrontal leucotomy has been used only sparingly, and during the year only two leucotomies were performed.

It is gratifying to note that petitions for writs of habeas corpus have shown a considerable falling off. During the year there were 15 orders to show cause, of which 13 were dismissed without a hearing, and 24 writs of habeas corpus were issued, only two of those patients being discharged. Total discharges for the year (not including deaths) were 748, or 55.5 percent of the number admitted, viz. 1,349.

MEDICINE AND SURGERY BRANCH

This Branch functions through its medical, surgical, syphilological and clinic services. The hospital is still the only public mental hos-

pital in the United States which is approved by the American Medical Association for rotating internship. It is also approved for a period of residency training in surgery and for internship in dentistry. These services are available to the patients of the hospital who are in need of medical or surgical attention of a specialized nature and to those employees who become ill or injured while on duty. During the year 2,417 patients were admitted to the wards of the Branch and a total of 63,502 visits to the clinics were made.

PSYCHOTHERAPY BRANCH

Psychodrama has continued active with 330 sessions being held during the year. Dance and art therapy have been carried on successfully. It should be noted in this connection that the stage of Hitchcock Hall and the auditorium have been completely refurbished with new drops, curtain and a general painting.

The Psychology Section continues to function actively. During the year 3,197 tests were given to 1,019 subjects, most of them patients, but some of them attendants and other employees. One resident and four interns have been active in the section during the year and field work has been supervised for six graduate students in psychology. Individual psychotherapy has been carried on, together with supervision of therapeutic reading, and vocational advisement. A special psychological study was made during the year in connection with the investigation of the use of reserpine.

LABORATORY BRANCH

Despite a change in the directorship and several other changes in personnel the additional load thrown on the laboratory by the Medical and Surgical Branch has been handled very effectively. During the year there were 245 autopsies, a rate of 48 percent. An active program of lectures for the benefit of the residents and the intern staff has been carried out and developed more actively. A number of researches are under way and two have been completed. A considerable amount of new equipment has been purchased for the biochemistry laboratory.

NURSING BRANCH

The first class of psychiatric aides has been graduated; the program is still under way. Attention is being given to expanding the program for affiliate nurses. Two hundred and twenty-one affiliates completed their course during the year; twelve basic nursing schools now affiliate with Saint Elizabeths Hospital for psychiatry, while applications from other schools for affiliation are pending. Field experience has been provided for 23 postgraduate nurses and for 69 Navy hospital corpsmen and women.

OCCUPATIONAL THERAPY BRANCH

The work of this Branch has continued actively, and the ward programs are still being expanded. Eight occupational therapy interns have received training during the year. It is gratifying to know that suitable educational standards for occupational therapists have finally been approved by the Civil Service Commission.

SOCIAL SERVICE BRANCH

During the year 1,321 patients were served, through a total of 6,627 interviews. The initial interview which had previously been arranged for all patients was eliminated during the year in order that all available time of the Branch staff might be concentrated on the discharge of patients. The Branch has worked closely with the visiting instructors from the District of Columbia Board of Education who have been teaching no less than 13 young patients. The Branch has likewise worked closely with the Rehabilitation Service of the District of Columbia and with the Public Assistance Division of the Department of Public Welfare. Unfortunately it is still the law that a patient who is under commitment to Saint Elizabeths Hospital is not legally competent and, therefore, cannot handle even public assistance funds which may be allowable for his benefit. It is hoped that this law may be changed some time in the future. The group activities with relatives of patients, mentioned in the last report, have continued to work with very substantial success.

CHAPLAIN SERVICES BRANCH

Regular services have been conducted for the Catholic, Protestant and Jewish patients. They have been well attended, and every effort has been made to enable every patient to attend the services provided his physical and mental condition warrant it. Services are held not only in the Hitchcock Hall Chapel but on various services such as the Geriatric and Howard Hall. The Catholic chaplain has been aided not only by a part-time priest but by a number of seminarians. The Protestant chaplain is in charge of the general training program for theological students and for ordained clergymen. He is in general charge, with the aid of his assistants, of the parochial and sacramental services for the Protestant patients. There is also a part-time Jewish chaplain who holds regular services.

During the year 24 students or ordained clergymen have received training. During the 11 years which have elapsed while the program has been in force 139 men have completed one quarter of the year or more of training. A questionnaire followup of those who have received training is being planned.

It is the general policy that every patient admitted should be visited by a representative of his faith as soon as possible after his arrival

at the institution. In addition, any patient may have his own clergyman or a clergyman of his own denomination visit him from the community if he so desires.

It is gratifying to report that the interdenominational chapel, the need of which had been acutely felt for many years, is now well under way and that probably during the coming year it will be ready for occupancy.

LIBRARY SERVICES

The Medical Library is operated primarily for the benefit of the medical staff. There are also library collections in the offices of the Nurses Training School, the Medical and Surgical Building, the Laboratory, Geriatric Building and Psychology Section. During the year there were 580 accessions, bringing the total number of volumes in the Medical Library to 17,178. In addition there are slightly over 15,000 miscellaneous pamphlets. A large number of inter-library loans have been made, and the hospital has become a member of the Medical Library Association. Space has finally been made available in an annex, which should give considerable relief to the overcrowded conditions of the Library.

The Patients' Library is in charge of one employee, who is assisted by about 25 patients. During the year there were 1,328 accessions, many of them by gift; the total number of volumes is 41,542. A very active circulation is maintained, approximately 5,600 volumes per month being sent to the various wards for the benefit of patients. Other patients visit the library, where they may select their own books. Numerous book-review sessions are held at the library, these reviews being well attended and presented. The annex, mentioned in the preceding paragraph, is used also by the Patients' Library with great advantage.

SPECIAL SERVICES BRANCH

The Special Services Branch, which was originally set up to take over the functions of the Red Cross when that organization discontinued its services in September 1952, has continued to function very efficiently. It has carried on close relations with the District of Columbia Chapter of the American Red Cross and with numerous other community agencies such as the American Legion and the American Legion Auxiliary. The various organizations and individuals have been most generous in donating their services, food and other material for the benefit of the patients. Thanks are particularly offered to the various organizations which have served, notably the Motor Corps, the Canteen Service, Production and Supply Service and the Gray Ladies of the American Red Cross. During the year the stage of Hitchcock Hall as mentioned earlier was completely refurbished with a cinemascope screen, backdrops, and curtain.

VOLUNTEER SERVICES BRANCH

This is a new branch, which was organized in September of 1954. It has developed most gratifyingly and has shown a steady growth. It has had a wide spread of activities and the response from various groups and individuals in the community has been most gratifying, notably not only the American Red Cross but the United Community Services and the National Catholic Community Services.

TEACHING ACTIVITIES

As in the past the hospital has continued to carry on an extensive program of teaching and training. It is approved for training in psychiatry during the three years of residency required by the American Board of Psychiatry and Neurology, and this program is in charge of a well trained psychiatrist. A schedule of lectures is arranged and individual guidance is given to the various residents. The hospital is also approved for rotating internship, affiliation being provided at the District of Columbia General Hospital for the interns. The George Washington University Hospital affiliation for psychiatric residents has continued, and during the year affiliation has been arranged with the Washington Institute of Mental Hygiene, (a Community Chest Agency) and with the Child Center of Catholic University. Instruction for medical students is provided for all three medical schools, namely, George Washington, Georgetown and Howard Universities. Dental interns and residents in surgery are also serving. Field work is provided by the Social Service Branch, for the Schools of Social Service of Catholic University and Howard University and for students of occupational therapy. Interns and residents are trained in the field of clinical psychology. Affiliation for undergraduate nurses and postgraduate nurses is being continued. A course for training psychiatric aides is likewise under way. The value of these training activities is immeasurable, not only to the persons trained but to the staff of the hospital. As a direct result the care of the patient is immensely stimulated. There seems no question that one of the important functions of a mental hospital is the teaching of persons in the various aspects of the care of mental patients. Another important contribution of any mental hospital is research; some of the projects under way have already been noted. Both teaching and research, however, are secondary to the primary object of the hospital, namely, the best possible care of the patient.

General Administration

The very important functions of general administration fall into two headings, one administrative and one maintenance. Under the

former we find the Registrar, Dietary, Personnel, Budget and Methods, Procurement, Property, Finance and Administrative Service Sections. The plant maintenance and the industries include Construction, Electrical, Mechanical, Garage, Housekeeping, Farm, Lawns and Grounds, Laundry and Shoe Shop Sections. An enumeration of these activities alone serves to indicate the wide scope of the various non-medical functions which enter into the care and treatment of the patient. It is obviously impractical, however, to report in detail as to the work of all these sections for the year.

The recruitment of senior medical officers and of nurses and stenographers continues to be difficult. Standards for nurse positions are being rewritten which may result in a higher allocation and consequent better pay. The need of a 25 percent differential on certified medical officers continues to be pressing in order to meet the competition of another Government agency which already has this provision. The turnover of personnel during the year amounted to 21 percent. The work of this Section becomes more and more complicated and probably additional personnel will have to be provided. The Incentive Awards Program has been carried on successfully.

The Administrative Services Branch has been in charge of civilian defense drills which have been held regularly at least once a month. Steps have been taken toward installing a new statistical system in order that better information may be had concerning the details of patient movement, diagnosis and so on.

The maintenance groups have functioned very efficiently during the year; there are many problems connected with a plant of the size of the hospital, particularly where many of the buildings are old. During the year two of the boilers in the powerhouse have been converted to oil as standbys and the installation of temperature controls has resulted in a greater efficiency of the use of steam. A new ice storage house has been completed.

The farm continues to function with reasonable efficiency. During the year it provided nearly 18,000 bushels of vegetables and over 28,000 ears of corn. Approximately 50 patients are occupied on the farm, these constituting a group who are by reason of their mental condition not able to function in other capacities. The existence of the farm furnishes a useful and healthful outlet for their activities; it seems quite important that the use of the farm should be continued.

Needs of the Hospital

The need for a new maximum security facility remains urgent, but some relief is at least in sight, funds having been appropriated for the drawing of plans. A cafeteria for Continued Treatment Buildings 7 and 8 is still urgently needed. This cafeteria was planned when

the buildings were begun, and the fact that it does not exist operates against the efficient use of these buildings. The crowding of the hospital continues to be serious and it is urgently recommended that careful consideration be given to additional ward buildings in order to relieve this highly undesirable crowding. Once again emphasis is laid upon the desirability of placing the hospital on an equal basis with other Federal agencies in order to provide premium pay for specialists. Additional personnel, both of physicians, nurses, and other ward types, is urgently needed if the high standards of the hospital are to be maintained.

Table 1.—Patients, admissions, and discharges, fiscal years 1935–55

Fiscal year	Average number of patients on rolls	Total number of admissions	Total number of patients discharged	Percent discharged in relation to admissions	Total number of deaths
1935.....	5,267	824	396	48.06	304
1936.....	5,373	925	552	59.68	298
1937.....	5,538	1,099	490	44.59	332
1938.....	5,836	1,029	461	44.80	267
1939.....	6,108	1,056	469	44.41	281
1940.....	6,395	1,202	619	51.50	322
1941.....	6,663	1,503	773	51.43	382
1942.....	6,994	1,797	1,534	84.36	371
1943.....	7,031	2,324	1,491	64.15	420
1944.....	7,161	2,599	2,056	79.11	441
1945.....	7,308	2,935	2,299	78.30	460
1946.....	7,044	1,909	2,477	129.75	396
1947.....	6,454	1,339	891	66.54	424
1948.....	6,621	1,420	856	60.28	431
1949.....	6,701	1,470	861	58.60	446
1950.....	6,897	1,648	960	58.25	495
1951.....	7,053	1,412	928	65.72	424
1952.....	7,172	1,438	814	56.6	431
1953.....	7,361	1,524	977	64.1	436
1954.....	7,392	1,385	921	66.5	416
1955.....	7,461	1,349	748	55.4	502

¹ 63.10 without transfer of 400.

Table 2.—Movement of patient population, fiscal year 1955

	Total	Male		Female			
		White	Other	Total	White	Other	Total
Total number under care and treatment, fiscal year 1955.....	8,779	2,722	1,687	4,409	2,646	1,724	4,370
Remaining on rolls June 30, 1954.....	7,430	2,347	1,405	3,752	2,219	1,459	3,678
Admitted during year.....	1,349	375	282	657	427	265	692
Total discharged or died.....	1,250	438	224	662	398	190	588
Discharged.....	748	279	143	422	217	109	326
Discharged as—							
Not insane.....	36	15	20	35	1	0	1
Recovered.....	77	12	21	33	25	19	44
Social recovery.....	231	69	44	113	74	44	118
Improved.....	252	125	42	167	59	26	85
Unimproved.....	152	58	16	74	58	20	78
Died.....	502	159	81	240	181	81	262
Remaining on rolls June 30, 1955.....	7,529	2,284	1,463	3,747	2,248	1,534	3,782
Change in color.....							
On visit or elopement.....	244	46	22	68	130	46	176
In Hospital.....	7,285	2,238	1,441	3,679	2,118	1,488	3,606

Table 3.—Consolidated statement of movement of patients, by classification, fiscal year 1955

	Reimbursable patients										Nonreimbursable patients																
	Subtotal	Bureau of Indian Affairs	D. C. residents	D. C. voluntary	U. S. Soldiers' Home	Veterans' Administration	U. S. - State prisoner	Subtotal	Army	Bureau Employment	Immigration and Naturalization Service	Bureau of National Homes	Canadian Insane	Canal Zone	Coast Guard	D. C. nonresidents	Federal Reservations	Foreign Service	Interned aliens	Marine Corps	Navy	D. C. prisoners	Sex psychopaths	Military prisoners	Federal prisoners	Public Health Service	Virgin Islands
On rolls, June 30, 1954.....	7,430	6,021	72	89	42	367	1	1,409	265	2	2	4	59	18	17	223	5	6	4	24	104	293	25	33	144	55	151
Admitted to June 30, 1955.....	1,349	1,102	3	92	37	24	0	247	10	1	1	1	1	1	1	117	20	1	3	2	5	65	7	1	1	45	---
Separations, fiscal year 1955.....	1,250	957	3	765	40	57	0	293	10	1	1	1	1	1	1	167	11	3	2	5	38	1	1	41	3	8	
Deaths.....	592	458	3	424	5	15	0	44	10	1	1	1	1	1	0	12	1	0	2	4	6	0	0	3	0	3	
Discharges.....	748	499	0	341	87	29	42	0	249	0	1	0	0	0	1	155	10	3	0	0	1	32	1	1	38	3	5
On rolls, June 30, 1955.....	7,529	6,166	72	89	39	334	1	1,363	255	1	2	4	58	17	16	173	14	3	4	22	99	320	31	32	148	52	143
Changes in classification, fiscal year 1955.....	0	-47	+1	-75	-1	+28	---	+47	---	---	---	---	---	---	---	+55	-5	---	---	---	---	-2	---	---	-1	---	---
Adjusted on rolls, June 30, 1955.....	7,529	6,119	73	5,556	88	362	1	1,410	255	1	2	4	58	17	16	228	9	3	4	22	99	318	31	32	147	52	143
On visit or elopement, June 30, 1955.....	244	212	---	202	4	6	---	32	1	---	---	---	1	---	---	9	2	1	---	---	---	17	7	---	---	1	
In hospital, June 30, 1955.....	7,285	5,907	73	5,354	84	39	356	1	1,378	254	2	4	57	17	16	219	7	2	4	22	99	301	24	32	147	52	142
Total treated fiscal year 1955.....	8,779	7,123	75	6,396	181	79	391	1	1,656	265	2	4	59	18	17	340	25	6	4	24	104	358	32	33	189	55	151

* Included in D. C. prisoner organization.

The following table shows the results of the investigation of the cases of diphtheria reported to the health department of the city of Chicago during the year 1916. The table is divided into two parts, the first showing the results of the investigation of the cases of diphtheria reported to the health department of the city of Chicago during the year 1916, and the second showing the results of the investigation of the cases of diphtheria reported to the health department of the city of Chicago during the year 1916.

Table 1. Results of the investigation of the cases of diphtheria reported to the health department of the city of Chicago during the year 1916.

Age	Sex	Occupation	Address	Onset	Duration	Result
10	M	School	1234 N. Dearborn	Jan. 15	10 days	Recovered
12	F	Home	567 E. Chicago	Jan. 20	12 days	Recovered
15	M	Factory	890 W. Madison	Feb. 5	15 days	Recovered
18	F	Home	123 E. Chicago	Feb. 10	18 days	Recovered
20	M	Factory	456 W. Madison	Feb. 15	20 days	Recovered
22	F	Home	789 E. Chicago	Feb. 20	22 days	Recovered
25	M	Factory	1011 W. Madison	Feb. 25	25 days	Recovered
28	F	Home	1345 E. Chicago	Mar. 5	28 days	Recovered
30	M	Factory	1678 W. Madison	Mar. 10	30 days	Recovered
32	F	Home	1901 E. Chicago	Mar. 15	32 days	Recovered
35	M	Factory	2234 W. Madison	Mar. 20	35 days	Recovered
38	F	Home	2567 E. Chicago	Mar. 25	38 days	Recovered
40	M	Factory	2890 W. Madison	Apr. 5	40 days	Recovered
42	F	Home	3123 E. Chicago	Apr. 10	42 days	Recovered
45	M	Factory	3456 W. Madison	Apr. 15	45 days	Recovered
48	F	Home	3789 E. Chicago	Apr. 20	48 days	Recovered
50	M	Factory	4012 W. Madison	Apr. 25	50 days	Recovered
52	F	Home	4345 E. Chicago	May 5	52 days	Recovered
55	M	Factory	4678 W. Madison	May 10	55 days	Recovered
58	F	Home	4901 E. Chicago	May 15	58 days	Recovered
60	M	Factory	5234 W. Madison	May 20	60 days	Recovered
62	F	Home	5567 E. Chicago	May 25	62 days	Recovered
65	M	Factory	5890 W. Madison	Jun. 5	65 days	Recovered
68	F	Home	6123 E. Chicago	Jun. 10	68 days	Recovered
70	M	Factory	6456 W. Madison	Jun. 15	70 days	Recovered
72	F	Home	6789 E. Chicago	Jun. 20	72 days	Recovered
75	M	Factory	7012 W. Madison	Jun. 25	75 days	Recovered
78	F	Home	7345 E. Chicago	Jul. 5	78 days	Recovered
80	M	Factory	7678 W. Madison	Jul. 10	80 days	Recovered
82	F	Home	7901 E. Chicago	Jul. 15	82 days	Recovered
85	M	Factory	8234 W. Madison	Jul. 20	85 days	Recovered
88	F	Home	8567 E. Chicago	Jul. 25	88 days	Recovered
90	M	Factory	8890 W. Madison	Aug. 5	90 days	Recovered
92	F	Home	9123 E. Chicago	Aug. 10	92 days	Recovered
95	M	Factory	9456 W. Madison	Aug. 15	95 days	Recovered
98	F	Home	9789 E. Chicago	Aug. 20	98 days	Recovered
100	M	Factory	10012 W. Madison	Aug. 25	100 days	Recovered

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 extension of its services to the schools and classes for the blind 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 to provide free school texts, tangible apparatus, and supplementary materials necessary in the education of the blind. Allocations of books and materials are made to the several schools on the basis of their enrollments. 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° ."

The Printing House maintains large catalogs of Braille books, Talking Books, Braille music publications, large-type texts, and tangible apparatus. The schools for the blind are thereby provided with a rich collection of educational material from the kindergarten through high school. There are approximately 7,520 blind children enrolled in the residential and public school classes for the blind being served by the Printing House.

During the 1955 fiscal year, Braille books, educational periodicals, and music made up approximately 58.26 percent of the materials required by the schools; Braille slates, Braille writers, maps, and other mechanical devices about 17.42 percent; Talking Books about 4.37 percent; and large-type books about 17.35 percent. Approximately 2.40 percent was used for miscellaneous items.

Gallaudet College

GALLAUDET COLLEGE is devoted to the education of deaf persons who because of their handicap are unable to make satisfactory progress in schools and colleges for hearing students. The college, located in Washington, D. C., is the world's only college for the deaf. In addition to education, it conducts research into the educational problems of deafness. It consists of the Kendall School and the college proper.

KENDALL SCHOOL

Primary and secondary schooling is provided for deaf children in the Kendall School, which also serves as a laboratory school for teachers training in the college. The oral method of instruction is used for all pupils except those who make no progress under it. Enrollment last year was 87, of which 73 came from the District of Columbia.

GALLAUDET COLLEGE

The college, established in 1864 by act of Congress, offers the associate's degree after 2 years of study and a bachelor's degree in the liberal arts and sciences. The Preparatory Department provides the senior year of high school for students who are unable to obtain it in the State schools for the deaf. The Graduate Department of Education offers a master's degree and a professional diploma in the education of the deaf to students with normal hearing. Total enrollment in the college last year was 285 with students from 43 States, the District of Columbia, and 9 foreign countries.

Gallagher College

Gallagher College is devoted to the education of deaf persons who because of their handicap are unable to make satisfactory progress in schools and colleges for hearing students. The college, located in Washington, D. C., is the world's only college for the deaf. In addition to education, it conducts research into the educational problems of deafness. It consists of the Randall School and the college proper.

REPUBLIC SCHOOL

Primary and secondary schooling is provided for deaf children in the Randall School, which also serves as a laboratory school for teaching the deaf in the college. The oral method of instruction is used for all pupils except those who make no progress under it. Enrollment last year was 87, of which 75 came from the District of Columbia.

GALLAGHER COLLEGE

The college, established in 1911 by act of Congress, offers the master's degree after 2 years of study and a bachelor's degree in the liberal arts and sciences. The Preparatory Department provides the senior year of high school for students who are unable to obtain it in the State schools for the deaf. The Graduate Department of Education offers a master's degree and a professional diploma in the education of the deaf to students with normal hearing. Total enrollment in the college last year was 267 with students from 42 States, the District of Columbia, and 2 foreign countries.

Howard University

HOWARD UNIVERSITY was established by an act of Congress dated March 2, 1867. Its charter provides "That there be established in the District of Columbia, a university for the education of youth in the liberal arts and sciences." The university has afforded an opportunity for advanced education to students from every walk of American life without regard to race, creed, color, or national origin.

The university is composed of a college of liberal arts, a graduate school, and now, beginning with chemistry, is offering work leading toward the degree of Doctor of Philosophy, and schools of engineering and architecture, music, social work, medicine, dentistry, pharmacy, law, and religion. Summer and evening schools offer work in adult education.

ENROLLMENT OF STUDENTS

During the academic year 1954-55 Howard University served 5,144 students: 3,774 during the regular school year, 1,101 in summer school, and 269 in adult evening classes. Of the 4,204 students in the 10 regular schools and colleges, 3,710 were seeking degrees. Of these, 3,384 came from 42 States and the District of Columbia. The remainder came from 30 foreign countries, the British West Indies, and United States possessions.

The 3,384 students from the continental United States:

New England States.....	73
Middle Atlantic States.....	518
East North Central States.....	187
West North Central States.....	56
South Atlantic States.....	2,044
East South Central States.....	250
West South Central States.....	220
Mountain States.....	12
Pacific States.....	24
	3,384

The 326 students from outside the continental United States came from Africa, Asia, Europe, and North and South America. Fifty-two students came from Egypt, Gold Coast, Liberia, Nigeria, and Sierra Leone; 17 from India, Indonesia, Iran, Malaya, Syria, and China; 18 from Belgium, England, Germany, Greece, Holland, Poland, Latvia, Turkey, and Yugoslavia; 2 from Canada; 16 from British Honduras, Dominican Republic, Cuba, Haiti, Panama, and Spanish Honduras; 38 from British Guiana and Brazil; 148 from the British West Indies; and 34 from the Canal Zone, Hawaii, Puerto Rico, and the Virgin Islands.

THE COMPREHENSIVE PURPOSE OF HOWARD UNIVERSITY

From the beginning, Howard University has welcomed students from every area of American life. It has likewise welcomed any and all such persons to membership in its faculties, on the basis of their ability and character as individuals.

One of the major purposes of the founders of Howard University was the admittance of Negro youth, among others. The institution has pioneered in offering professional training to Negroes. During its 90 years, Howard University has been the only university of public support in the Southern States which has offered to a substantial number of Negro youth any approximation of the wide scope of undergraduate, graduate, and professional studies characteristic of American State institutions.

Since 1948, public institutions in 12 Southern States, hitherto closed to Negroes, have opened their doors; but in 1955 Howard University still enrolled a larger number of students in accredited schools of medicine, dentistry, pharmacy, music, engineering and architecture, and social work than in all other universities and colleges together in the entire area of the Southern States.

VETERANS

There were 626 veterans enrolled at Howard University during 1954-55, an increase of 52 over the previous year. Of this total, 147 were veterans of World War II and 479 were veterans of the Korean conflict. The number of veterans of World War II decreased by 207, while there was an increase of 259 Korean veterans.

ARMY AND AIR RESERVE OFFICERS' TRAINING CORPS

The Army Reserve Officers' Training Corps enrolled 224 students during 1954-55. The fourth year course was completed by 24 students in partial fulfillment of the requirements for commissions as second lieutenants. The Air Force Reserve Officers' Training Corps enrolled 253 students. In June 1955, 30 students were commissioned.

THE FACULTY

During 1954-55 the university was served by 459 regular teachers, 268 giving their full time.

From the beginning in 1867, the founders invited to the faculties of Howard University men and women, on the basis of their ability and character as individuals, without discrimination as to sex, race, creed, color, or national origin. Today, there are men and women representative of every racial stock in America and of virtually all the major religious affiliations in the world.

But it was a major purpose of the founders to employ Negro teachers, among others, on every faculty. Today the Negro members of the faculties, exclusive of the school of religion, constitute a group of Negro teachers larger by far than all the Negroes so employed in all other American universities combined. The existence of this group of Negro university teachers has been an inspiration to the Negro people for more than three-quarters of a century, and membership on one of these faculties has been the first employment of many of the most outstanding Negroes in the public life of America. From them came the founder of the first blood plasma bank in the world, the most distinguished Negro industrial chemist in America, the first Negro governor of an American possession, the first Negro in the Secretariat of the United Nations, the first Negro member of the United States Court of Appeals, and the first Negro cultural attache in the diplomatic service of the United States to a major European nation.

CONTINUATION OF THE BUILDING PROGRAM

In January 1955 the College of Dentistry moved into its new building, designed to accommodate 400 students. Modern equipment is installed to accommodate 225 students. Facilities include four pre-clinical laboratories, a 62-chair general dental clinic, a library, cafeteria, and student and faculty lounges. This building and its equipment were made possible by an appropriation of \$2,565,221 by Congress.

During the year 1954-55, also, the construction work for transforming the old general science building into a building equipped for modern instruction in physics was completed and the installation of equipment had proceeded far enough to enable work in physics to begin during the second semester. This work was made possible by an appropriation of \$320,000 made by Congress in 1948 and 1949.

Work continued on the new Pharmacy and Biology-Greenhouse Buildings with the goal of having them ready for occupancy in the fall of 1955. Construction was begun on the new Administration Building and the building for the School of Law.

Plans and specifications for the new pre-clinical medical building had been completed, and the plans and specifications for the Auditorium-Fine Arts Building and the new Men's Dormitories were well under way.

RECOMMENDATIONS OF FREEDMEN'S HOSPITAL SURVEY

The Findings, Conclusions and Recommendations of the Freedmen's Hospital Study Commission, appointed by the Secretary of Health, Education, and Welfare, were finished and made available in May. The Chairman and members have listed and carefully studied every important question bearing upon the future of Freedmen's Hospital and its relation to the School of Medicine of Howard University.

GRADUATES

During the year Howard University graduated 514 persons. Since its origin it has graduated 18,709 persons. These graduates are at work in 43 States and 27 foreign countries. They constitute a cross section of the leadership of the Negro people. Together, these graduates constitute the largest and most diversified group of trained Negro public servants related to any single institution in the world.

SERVICE IN FOREIGN COUNTRIES

Howard University students and teachers have associated daily with teachers and students representative of every race and color and many of the major creeds of the world. In recent years many of those teachers and students as individuals and in groups have traveled on missions to many countries in Europe, Asia, and Africa, as now in India, Iraq, and Indonesia. Again and again the responsible leaders in Government and the friends of America have acknowledged their services as being of great value to their country and to the cause of democracy.

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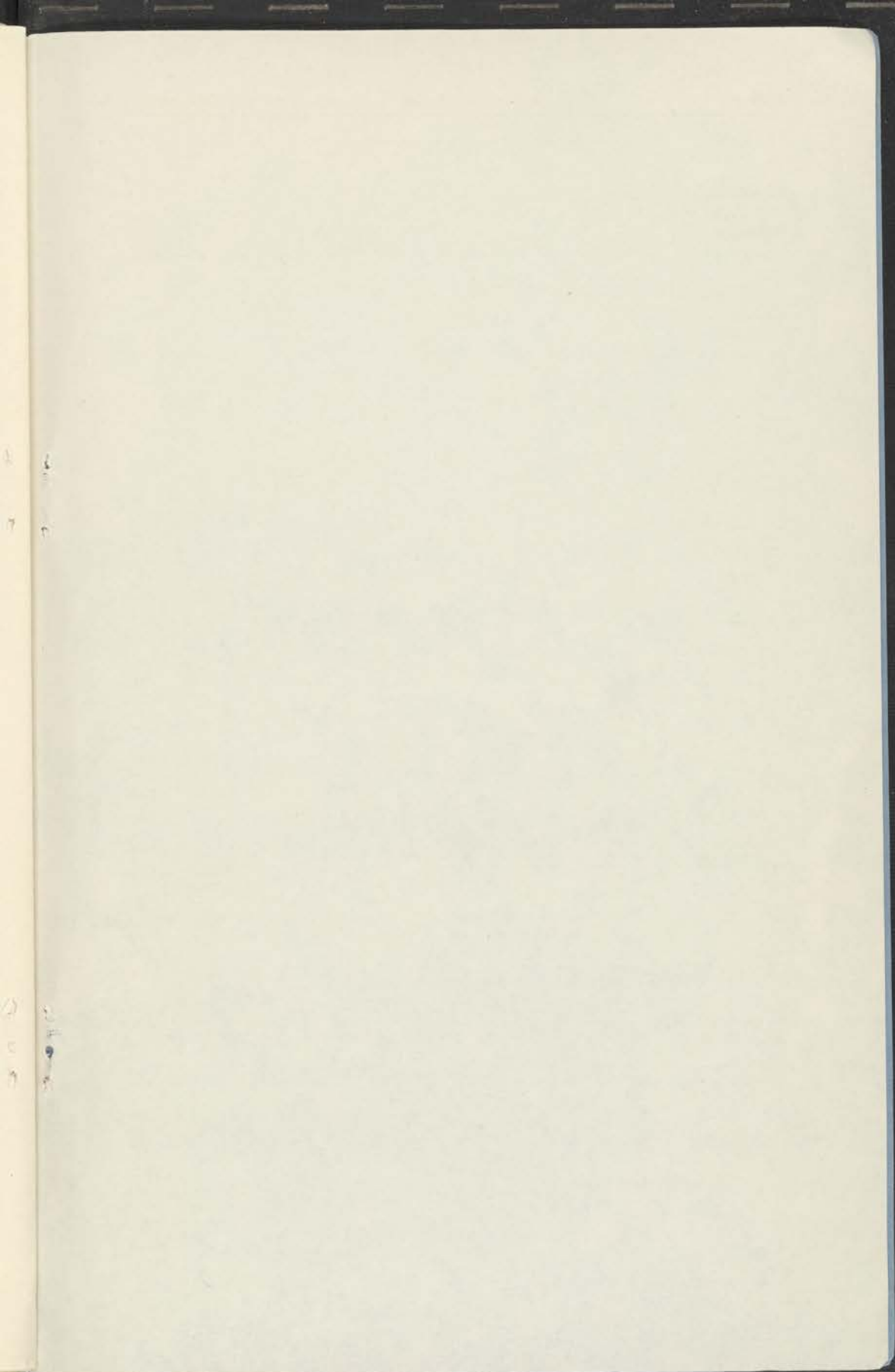
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