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Descriptors- *FEDERAL PROGRAMS, GRANTS, *MANPOWER DEVELOPMENT, *MANPOWER UTILIZATION, PROJECT APPLICATIONS, *RESEARCH PROJECTS

Identifiers- Manpower Development and Training Act

Contracts and grants sponsored under the Manpower Development and Training Act of 1962, as amended, which were active during fiscal year 1964 are described and projects are grouped under headings of: (1) Present Requirements, (2) Future Requirements, (3) Present Resources, (4) Future Resources, (5) Development of Manpower Resources--Education, (6) Development of Manpower Resources--Training, (7) Development of Manpower Resources--Utilization, (8) Nature and Conditions of Employment and Unemployment--Factors Affecting Job Finding and Placement, (9) Nature and Conditions of Employment and Unemployment--Employment, (10) Nature and Conditions of Employment and Unemployment--Unemployment, and (11) Automation. The contract number, project title, contractor, principal staff, objectives and procedures, status of project, and highlights of findings, if available, are listed for each project. Reports are indexed by contractor and subject. Appendixes contain guidelines for submission of research proposals, the availability of research reports, and a list of Office of Manpower, Automation and Training field offices. (DM)

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MANPOWER AND AUTOMATION RESEARCH

SPONSORED BY THE

OFFICE OF MANPOWER, AUTOMATION AND TRAINING

JULY 1, 1963 - JUNE 30, 1964

U.S. DEPARTMENT OF LABOR
W. Willard Wirtz, Secretary
MANPOWER ADMINISTRATION

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③ Office of Manpower, Automation and Training *Washington, D.C.*
Seymour L. Wolfbein, Director

**U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
OFFICE OF EDUCATION**

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NOVEMBER 1964

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INTRODUCTION

The Office of Manpower, Automation and Training (OMAT) conducts research in the broad areas of manpower resources, requirements, development, and utilization for the purpose of developing information and methods needed to deal with the problems of unemployment. It utilizes its own staff resources, those of the Department of Labor and other Federal agencies, and research resources outside the Federal Government.

Under the authority given to the Department of Labor by Title I of the Manpower Development and Training Act of 1962, as amended, and other authorities, OMAT conducts a contract research program. This report lists all projects within the contract research program which were active during Fiscal Year 1964. The projects are indexed by subject and contractor at the end of the report. Any research findings included are preliminary and subject to revision.

Appendix I contains guidelines for preparation of research proposals by prospective contractors. It suggests that initial submissions be in the form of preliminary submissions of research ideas. When such ideas give evidence of supporting the objectives of the program, and are nonduplicative of other research, OMAT may request formal contract research proposals in accordance with these guidelines.

OMAT accepts for consideration proposals from academic institutions, State and local government organizations, and other organizations and individuals with research capabilities in the manpower area. Each proposal is reviewed by OMAT's research staff, and, if it meets established standards and criteria for OMAT projects, and does not duplicate other research, it is distributed for review by research specialists in areas of special interest. This may involve any number of government agencies, including research consultants available to them. Based on the evaluation of comments received, and with required legal, budgetary and other clearances, acceptable proposals are reviewed in relation to research priorities, and negotiations are entered into for those which are selected for final contracting consideration.

Appendix II lists libraries and field offices at which completed contract research reports--marked by an asterisk (*) in this report--can be consulted. For further information on specific projects mentioned in this report, write to:

Director
Office of Manpower, Automation and Training
U. S. Department of Labor
Washington, D. C. 20210

Other publications available from OMAT's Office of Research are listed on page 131.

THE MANPOWER ACCOUNT

PRESENT REQUIREMENTS

Contract No.: MDTA 2-64

Project Title: Institutes for Educators on Manpower Requirements

Contractor: Joint Council on Economic Education
New York, New York

Principal Staff: Dr. M. L. Frankel, Director
Dr. G. L. Ferish, Associate Director

Objectives and Procedures:

The objective of this study is to experiment with and investigate the development of manpower information services for schools so that they may better develop curricula and guidance programs in keeping with manpower trends in the economy.

The procedure followed was to organize and conduct pilot institutes and stimulate followup activities focused upon this objective for selected participants from three States. Arkansas, Iowa, and Ohio were selected as States representative of particular situations for manpower requirements. The educator participants in the institutes represented teams of school systems within the States; other participants included representatives of major segments of the economy concerned with manpower and education relationships.

Status of Project:

The three institutes were completed in May 1964, and the coordinators are in the process of developing reports and recommendations. There will be followup activities for the institutes in each of the States, and a comprehensive report on the findings and recommendations is scheduled for late 1964.

Contract No.: MDTA 26-64

Project Title: A Manpower Study of Clinical Laboratory Personnel

Contractor: The University of North Carolina, Department of Hospital Administration, School of Medicine, Chapel Hill, North Carolina

Principal Staff: Dr. Robert R. Cadmus

Objectives and Procedures:

This study will include all aspects of manpower and equipment requirements in clinical laboratories. Skill levels, equipment, recruitment, training, and upgrading of abilities are included. The study will involve a sample of 60-100 laboratory personnel in a minimum of 20 hospitals. It will attempt to sort out the various levels of skill required in the field of medical technology and relate these jobs to the appropriate educational requirements.

Data would be gathered from the Duke Endowment and a variety of agencies and organizations particularly concerned with manpower aspects of laboratory technology, as well as the selected hospitals.

Status of Project:

This contract is scheduled for completion in late 1965.

FUTURE REQUIREMENTS

Contract No.: MDTA 32-64

Project Title: Conference on Methods of Projecting Manpower Supply and Demand

Contractor: The University of California, Berkeley, California

Principal Staff: Dr. R. A. Gordon
Co-Director, Berkeley Research Program
on Unemployment and the American Economy

Objectives and Procedures:

The conference was designed to bring together those individuals inside and outside of government who are concerned with the development of methodology for labor force projections and with the actual application of the methodology. It brought together some 40 representatives of the Departments of Labor, Commerce, Agriculture, and Defense, the Council of Economic Advisers, the Bureau of the Budget, the National Science Foundation, the Federal Reserve System, the Senate Committee on Employment and Manpower, the Brookings Institution, and 11 colleges and universities, to consider current techniques and methods for improving these procedures, and to make recommendations for achieving more accurate forecasting of labor supply and demand, by occupation and industry.

Status of Project:

The conference was held at the Brookings Institution in Washington, D.C., on June 25 and 26, 1964. A report on the results of the conference is scheduled for late 1964.

Contract No.: MDTA 20-63

Project Title: Research Study of Labor Force Trends and Projections
in the United States

Contractor: National Bureau of Economic Research, Inc.
New York, New York

Principal Staff: Dr. Richard A. Easterlin
Member, National Bureau of Economic Research
Research Staff
Chantal Dubrin, Research Assistant

Objectives and Procedures:

The purpose of this study is to analyze recent and long-term trends in the growth and character of the labor force and to appraise their effects on labor force growth in the future.

A three-phased study is planned: A description and appraisal of the "long swings" in labor force growth since 1870; a more detailed analysis of the impact of developments shaping labor force growth from 1940-60, with a view to establishing the particular age-sex groups which were particularly affected by population and occupational changes; and a consideration of the implications of labor force growth from 1960-75 to determine the projected situation of various age-sex groups.

Status of Project:

A preliminary report is expected in September 1964 and a final report early in 1965. Individual sections of the study will be available for circulation before completion of the full report.

Contract No.: MDTA 29-64

Project Title: The Changing Skill and Occupational Composition of
Employment Opportunities

Contractor: Harvard University, Cambridge, Massachusetts

Principal Staff: Dr. John Dunlop

Objectives and Procedures:

This study seeks to develop improved concepts, procedures, and measures of the distribution of occupations among the Nation's employed labor force. These are expected to permit more detailed and accurate estimates of changes in the relative demands for labor resulting from technological and market developments.

More accurate groupings of occupations at various skill and responsibility levels are needed to provide better estimates of changing job requirements. The project will attempt to develop such groupings through experimentation with past manpower data. The ranking of occupations will be checked using tests such as job evaluation, relative wage levels, mobility patterns, and education and training levels.

The various occupational categories developed will be used for a projection of employment levels for 1970 or 1975.

Status of Project:

The project's final report is due by late 1965.

Contract No.: MDTA 23-64

Project Title: Estimates of Employment Requirements by Occupation
for 1970

Contractor: Bureau of Labor Statistics, U. S. Department of Labor
Washington, D. C.

Principal Staff: Cora E. Taylor

Objectives and Procedures:

The principal objectives of the project are:

1. To develop projections for 1970 of occupational patterns in approximately 125 industries. These, together with projections of employment by industry, will be used to develop estimates of employment requirements for about 100 occupations which require specialized training or extensive education.
2. To prepare a computer-oriented system for the application of projected occupational patterns to industry employment projections.

The methodology involves the preparation of detailed 1970 occupational patterns for industries by utilizing latest Census of Population and other time series data, as well as studies of technological change and other factors likely to modify past trends. The final occupational patterns will be suitable for application to industry employment estimates now being prepared in connection with the Economic Growth Project. It will thus be possible to get occupational employment estimates for 1970 for approximately 100 specific occupations and for residuals in each broad occupational group.

Status of Project:

The study is expected to be completed by the end of 1965.

Contract No.: MDTA 41-64

Project Title: To Develop a Model or Models for Projecting Employment by Industry and by Occupation for Counties, Labor Areas, or SMSA's Together With Appropriate Data

Contractor: Temple University, Philadelphia, Pennsylvania

Principal Staff: Dr. Louis P. Harms

Objectives and Procedures:

This project will develop models for projecting employment by industry and by occupation for local areas. The object of such projections is to forecast the job openings of industries and occupations within the area so appropriate action may be taken to implement local manpower policies. Such forecasts may also be used as planning goals for industrial development and development of manpower resources.

Models for achieving these projections will be developed based on differing industry structures for areas which may be grouped as to (1) their urban, metropolitan character, and whether the area is specifically resource oriented or not; (2) industry structures not in urban areas, but not farming areas, i.e., counties or small labor areas, whether resource oriented or not; and (3) largely farming counties. Once the models have been developed for these areas, they could be applied to other areas having similar economic bases.

The procedure for the development of the models will be to analyze historical data for trends, project the basic trends, and then engage in a further analysis in order to gain an understanding of the forces which produced the trends and thereby obtain a judgment about the likelihood of the persistence of those trends. The judgments would then be given weight which would produce modifications of the trends if projected into the future. Projections of employment by industry and occupation for the model areas will be made for 1965, 1970, 1975, and 1980.

Status of Project:

The final report is scheduled for late 1965.

Contract No.: MDTA 42-64

Project Title: Methodology for Projection of Selected Occupational Trends in the Denver Standard Metropolitan Statistical Area

Contractor: The University of Colorado, Boulder, Colorado

Principal Staff: Dr. William H. Miernyk, Director
Bureau of Economic Research

Dr. Leslie Fishman
Professor of Economics

William E. Roberts

Objectives and Procedures:

The objective of this study is to develop methodological techniques for the projection of manpower requirements for areas smaller than a region or a State using the Denver area as a prototype. Efforts will be made to develop projections based on accepted statistical methods and judgment, and to determine the extent to which national and regional techniques can be applied to the Standard Metropolitan Statistical Area (SMSA). The projections will be related to current vocational training programs and facilities and to other sources of supply for workers in selected occupations to assist those engaged in long-range manpower planning and in the planning of vocational education curriculums.

Projection techniques currently utilized by government and private research organizations will be tested for the Denver SMSA, insofar as data availability permit. Where necessary, modifications will be introduced to adapt existing techniques to the availability of data on a small area basis, and to account for geographical shifts which have no influence on national projections. The results can be expected to show the variables which must be taken into account when applying techniques originally developed for use at the national or regional level to the Standard Metropolitan Statistical Area.

Status of Project

A preliminary report is to be submitted in mid-1965 and the approved final report is due later in 1965.

Contract No.: MDTA 19-63

Project Title: Research Design To Forecast Demand for New
Types of Technicians in an Industry

Contractor: Engineering Experiment Station
Georgia Institute of Technology
Atlanta, Georgia

Principal Staff: Dr. John L. Fulmer, Principal Investigator
Dr. Robert E. Green
Dr. Paul B. Han

Objectives and Procedures:

The objective of this study was to develop methods useful for forecasting demands for specific new types of technicians emerging as the result of developing technology.

A selected group of occupations in the textile industry in Georgia were studied to develop techniques which may be used to identify newly emerging technical jobs, and to develop future industry requirements for these occupations.

Status of Project:

A final report entitled Research Design To Forecast Demand for New Types of Technicians in an Industry was received and distributed to OMAT field offices and selected libraries.

Highlights of Findings:

The report presents a design for developing forecasts based on intensive personal interview and followup techniques. The study found that the incidence of new technical occupations in specific industries (such as the textile industry in Georgia) is relatively small. To overcome this problem, the report suggests that virtually 100-percent samples are required. The large-scale surveys required to achieve this would probably yield results which would not be commensurate with the costs involved.

PRESENT RESOURCES

Contract No.: MDTA 27-64

Project Title: Relationship Between Patterns of Child-Bearing and Labor Force Participation of Women

Contractor: Bureau of the Census, U. S. Department of Commerce, Washington, D. C.

Principal Staff: Stanley Greene, Chief, Economic Statistics Branch, Population Division

Objectives and Procedures:

The data will provide new information on factors influencing the labor force participation of married women. Among these factors are age and number of children, and the length of time women have been married.

For the first time, data will be available on the labor force status of women immediately subsequent to the birth of their first child. In addition, detailed data will now be available relating to size of family as well as family formation patterns with income of husband. These data should provide new insights into the labor force propensities of women in different socio-economic statuses.

Status of Project:

Tabulations are scheduled for delivery in mid-1965.

Contract No.: MDTA 28-64

Project Title: Tabulations on the Labor Reserve

Contractor: Bureau of the Census, U.S. Department of Commerce,
Washington, D.C.

Principal Staff: Stanley Greene, Chief, Economic Statistics Branch,
Population Division

Objectives and Procedures:

Data will be provided from the 1960 Census giving a variety of characteristics of persons who were not in the labor force at the time of the Census but who had been in the labor force at some time between 1950 and 1960. This information will be of value in analyzing:

1. The number and characteristics of unused but experienced workers in specific occupations, particularly those in scarce supply. Information on the occupational reservoir available for recall in the event of a national emergency will be of considerable concern.
2. Occupational separations. For some occupations it may be possible to construct separation rates for use in estimating replacement needs.
3. Work-life patterns. The data should be helpful in interpreting work-life patterns, particularly for marginal or occasional workers who frequently move in and out of the labor force.
4. Numbers and characteristics of recently retired older persons. These data will give an indication, by age and occupation, of the extent of "squeezing out" of the labor force.

Status of Project:

Tabulations are scheduled for delivery in the spring of 1965.

Contract No.: MDTA 6-63

Project Title: Characteristics of Persons by Their Family Status, 1963

Contractor: Bureau of Labor Statistics, U.S. Department of Labor, Washington, D.C.

Principal Staff: Gertrude Bancroft, Special Assistant to the Commissioner of Labor Statistics

Objectives and Procedures:

Detailed interrelated information for 1963 on family income, employment status, educational attainment of parents, age of children, occupational data, etc., will be obtained from persons included in the household sample for the Current Population Survey. These data will be used in the March 1965 Manpower Report of the President.

Status of Project:

Final tables are expected to be available by fall 1964.

Contract No.: MDTA 4-63

Project Title: Analytical Memoranda on Manpower Resources of the United States and Each of the 50 States, Identifying Critical Social and Economic Characteristics of the Labor Force

Contractor: The Bureau of Economic and Business Research, University of Florida, Gainesville, Florida

Principal Staff: Dr. John Webb

Objectives and Procedures:

This project involves a series of examinations of the decennial census data of 1950 and 1960 with respect to patterns of labor force behavior. Analyses have been made of:

Employment changes resulting from defense contracts,

Shifts in the classes of workers according to the source of income,

Employment patterns of women workers, and

Labor force participation in each of the 50 States.

Status of Project:

Four draft memoranda were received and used as background and analytical material in the preparation of the 1964 Manpower Report of the President.

FUTURE RESOURCES

Contract No.: MDTA 10-63

Project Title: Current Population Survey Methods Test Program

Contractor: Bureau of the Census, U.S. Department of Commerce,
Washington, D.C.

Principal Staff: Robert B. Pearl

Objectives and Procedures:

In order to improve the usefulness of key labor force data, various methods of collection are being tested. Procedures tested to date include:

1. The use of a more intensive questionnaire with independent interviews each month. In addition to the basic labor force questions, the form contains probing questions to determine the accuracy of reported number of hours worked, the accuracy of the report on duration of weeks looking for work, specific efforts made to find work, background information about persons not currently in the labor force, and clarification of self-employed status.
2. The collection of data through self-enumeration. All of the basic labor force information is included in advance mail forms to be completed by each member of a household and returned. In case of incomplete data or nonresponse, the interviewer conducts a followup interview.
3. The use of dependent interviewing--a technique in which the previous month's responses are available at the time of the interview for comparison and reconciliation with the current month's data.

Methods of testing have included:

1. The establishment of a group of households in three counties (Ohio, Massachusetts, North Carolina) to be used for the research.
2. The conduct of interviews on the basis of groups of procedures which combine the various experimental interviewing techniques with the standard CPS procedure as a control.
3. Reinterview procedures to aid in the evaluation of the test results.

Status of Project:

The project was started in 1963 and will be completed by mid-1965.

BALANCING THE MANPOWER ACCOUNT

DEVELOPMENT OF MANPOWER RESOURCES—EDUCATION

Contract No.: MDTA 34-64

Project Title: Pilot Program in Manpower Development to Assist
School Districts to Modernize in the Face of
Technological Change

Contractor: National Education Association, Washington, D. C.

Principal Staff: Dr. Virgil M. Rogers, Project Director

Objectives and Procedures:

This project is intended to help schools reorient their vocational education programs and to assist them in identifying implicit opportunities for shifting to broader and more general concepts of vocational education. The study will seek to determine means of adapting educational systems to current and future technological requirements.

The staff of the project will work with the staff of each of two school districts--Quincy, Massachusetts, and Parkersburg (Wood County), West Virginia. Both of these communities, through their superintendents of schools, have indicated a willingness to look for new techniques and content which relate to changing manpower requirements.

Status of Project:

To be completed by mid-1965.

Contract No.: MDTA 1-64

Project Title: Income and Education

Contractor: Dr. Herman Miller, Washington, D. C.

Principal Staff: Dr. Herman Miller

Objectives and Procedures:

The purpose of this study was to provide research material for use in the President's Manpower Report for 1964 relating income to education.

The Contractor used Census material to study and report on the income and educational attainment of males, in some detail by occupational groups such as professional workers, farmers, clerical workers, craftsmen, semiskilled, and unskilled workers. Differences between the relationships of education and income were reported on for white and non-white workers.

Status of Project:

A final draft of the material was received and used in the preparation of the President's Manpower Report for 1964.

Highlights of Findings:

This study emphasized the value of education in a work career. Persons with better education get better jobs. Even within the same occupation and age group, persons with more education generally earned more than those with less education.

Contract No.: MDTA 22-64

Project Title: Negro College Graduates' Attitudes

Contractor: National Opinion Research Center, University of Chicago,
Chicago, Illinois

Principal Staff: Dr. Peter Rossi

Objectives and Procedures:

This study will attempt to determine the employment aspirations, career decisions, and plans for graduate training of a selected sample of the 1964 college graduating class. These plans, insofar as they apply to Negro graduates, will be evaluated in the light of their attitudes toward their schools, the social situation on campus, and their concept of employment prospects.

This contract was negotiated with the National Institutes of Health--the National Science Foundation and the Labor Department are co-sponsors. The study involves the use of two questionnaires. The Labor Department is supporting the questionnaire to be sent to a stratified sample of Negro students attending both predominantly white and predominantly Negro universities.

Status of Project:

Preliminary results are expected by the fall of 1964.

DEVELOPMENT OF MANPOWER RESOURCES—TRAINING

Contract No.: MDTA 7-63

Project Title: Formal Occupational Training of Adult Workers -
Its Extent, Nature, and Use - April 1963

Contractor: U.S. Department of Labor, Bureau of Labor Statistics,
Washington, D. C.

Principal Staff: Sophia Cooper, Chief, Division of Population
and Labor Force Studies, and Carl Rosenfeld

Objectives and Procedures:

This study was designed to analyze the relationship between the type and source of training which workers have received and the utilization and application of their acquired skills. Conducted concurrently with the April 1963 Current Population Survey, the questionnaire was administered to persons 22 years of age and over in the labor force, including both employed and unemployed workers.

Information was collected on types and extent of training, occupation, age when training started, duration of training, and the utilization of skills trained for by age, schooling, sex, race, and occupation. Questions relating to the source of training covered vocational or business programs in high schools, junior and teachers colleges, vocational schools, technical institutes, apprenticeship programs, company training courses, Armed Forces training, and correspondence schools.

Status of Project:

A research monograph based on this survey will be published during 1964.

Highlights of Findings:

The study reveals a strong positive association between educational attainment and the degree of formal vocational training. Older workers, nonwhite workers, and the unemployed ranked lowest not only in educational attainment, but also in formal vocational training. This relationship results largely from the concentration of formal job training in educational institutions or in institutions requiring a diploma for admission. Widespread utilization of training is evident. Three-fifths of all workers with training were using it in present jobs, and 30 percent of all workers said they had relied on formal training to learn their jobs. The survey findings further emphasize the need to reduce the school dropout rate and to provide job training for workers with little education.

Contract No.: MDTA 37-64

Project Title: A Study of School and Community Factors Related
to Vocational School Placement and Employment
Performance in Trade and Industry

Contractor: American Institute for Research, Pittsburgh,
Pennsylvania

Principal Staff: Dr. M. U. Eninger, Senior Research Fellow

Objectives and Procedures:

This study is expected to generate broad recommendations for the improvement of placement activities of vocational schools. The placement performance (defined in terms of the rate at which graduates find jobs in the fields for which they receive training) and the employment performance (defined in terms of the graduates' employment, progress in earnings and promotions, job satisfaction, et cetera) of a sample of vocational schools offering trade and industry courses will be measured. These measurements will be used to identify some particularly successful and relatively unsuccessful schools. Interviews, questionnaires, attitude scales, and other tools will then be used to develop data on such school characteristics as placement services, and relations with employers, labor unions, and other community leaders.

It is hoped that the final report can set forth the reasons for differences in placement and employment performance among schools, and explain the extent to which these factors are controllable by the schools.

Status of Project:

The final report is scheduled for early 1966.

Contract No.: MDTA 12-64

Project Title: The Scope of Industrial Training in Selected
Skilled and Technical Occupations

Contractor: Stanford Research Institute, Menlo Park,
California

Principal Staff: David S. Bushnell and Dr. Harry V. Kincaid
Division of Behavioral Sciences Research

Objectives and Procedures:

This study will help to determine the scope and impact of company-sponsored training efforts for skilled workers. Eight blue-collar occupations, all of which have grown faster than the total labor force in recent years, have been selected for study. In addition to a close examination of training in these occupations, the study will explore some more general relationships between training within industry and the training conducted by various types of schools. Some of the basic issues for which answers are sought with respect to the selected occupations are: (1) where workers have developed their skills, (2) the extent to which industry does its own training and relies upon extramural training agencies, and (3) the reasons why some companies put forth stronger training efforts than others.

The most important of the techniques used for the collection of data will be a questionnaire survey covering public utilities and metal working firms with 500 or more employees. For the firms selected, questions will be addressed to company presidents, training directors, and workers in the occupations selected for study.

Status of Project:

Data collection is scheduled for late 1964, and the final report is to be completed in early 1965.

Contract No.: OAM 5-63 (C)

Project Title: Trends in European Apprenticeship Related to Accelerated Technical Development

Contractor: International Labor Organization, Geneva, Switzerland

Principal Staff: Jacques Monat

Objectives and Procedures:

The principal objective of this project is to determine the main trends in apprenticeship and to make international comparisons with a view to determining adjustments which might be considered desirable to bring traditional apprenticeship practices into line with the changing requirements of modern industry.

The method to be used in this project will include:

- (a) A preliminary study of existing practices and regulations, supplemented by a questionnaire inquiry and interviews with leading experts in the field of apprenticeship administration, and
- (b) A later field study to assess the degree to which the standards laid down in the apprenticeship regulations are upheld by examination procedures.

Status of Project:

The final report is to be completed by late 1964.

DEVELOPMENT OF MANPOWER RESOURCES—UTILIZATION

Contract No.: MDTA 25-64

Project Title: The Placement of College Teachers

Contractor: The University of North Carolina, Department of Economics,
Chapel Hill, North Carolina

Principal Staff: Dr. David Brown

Objectives and Procedures:

An attempt will be made to show the various methods by which college teachers, including those employed by 2-year institutions, obtain positions. The study will also make some observations about the utilization of college teachers and hopefully will recommend ways in which their placement might be improved. Formal and informal arrangements and their importance to instructors of various ranks and in different fields will be investigated. The importance of school prestige, geographic region, doctrine, and demographic factors will be included in the study.

A sample of 6,000 college teachers will be contacted and given questionnaires. They will be drawn from stratified samples of 50 academic departments, 50 college placement offices, 25 professional associations, 25 public employment offices, 10 religious groups, and 10 employment agencies.

Status of Project:

The contract is scheduled for completion in late 1965.

Contract No.: MDTA 4-64

Project Title: Study Tour of Industrial Therapy Centers in
Western Europe that Provide Occupational
Rehabilitation for Older Workers

Contractor: The University of Michigan, Ann Arbor, Michigan

Principal Staff: Dr. Dorothy H. Coons

Objectives and Procedures:

The purpose of this study was to develop information useful in planning an educational program to train middle-aged men and women to work as therapy aides in sheltered workshops and other retraining centers directed toward the use of industrial therapy in the treatment of the aged.

The study tour was designed to cover European rehabilitation, mental health, and other centers providing industrial milieu therapy. Methods and curriculum content used in training professional workers in these types of settings were investigated, and the practices and procedures of administration of workshops which provide occupational therapy in retraining older workers were observed.

Status of Project:

The final report of the project, Result of a Study Tour of European Industrial Therapy Programs* has been published and distributed.

Highlights of Findings:

The report indicates little or no formal training programs exist in the countries studied for either the management of industrial therapy programs or for the industrial therapists themselves. The industrial therapy programs are providing beneficial effects on the health of older workers and employment opportunities for them after release from the institutions. With the growth in the old-age population, the field of industrial therapy also offers increasing employment opportunities.

Contract No.: MDTA 3-64

Project Title: A Series of Department of Labor One-Day Seminars
on Employment of Minority Groups

Contractor: Leadership Resources, Inc.
Washington, D. C.

Principal Staff: Dr. Gordon Lippitt

Objectives and Procedures:

A series of seminars for Department of Labor supervisors and executives were held in the 12 regional offices of the Department to cover factors affecting the employment of minority groups. Social and psychological factors affecting attitudes of people in dealing with intergroup relations as they relate to achievement of equal employment opportunities were also discussed.

Status of Project:

The seminars, conducted as informational projects under Title I of the MDTA, were completed October 29, 1963. A report on the results of these seminars was received in December 1963.

Contract No.: IDTA 30-64

Project Title: Conference with School Guidance Counselors

Contractor: Women's Bureau, U.S. Department of Labor,
Washington, D. C.

Principal Staff: Mary Dublin Keyserling, Director

Objectives and Procedures:

The purposes of the conference were:

- (a) To re-examine the approaches of school guidance counselors to the counseling of girls--in light of the changing employment outlook for women and their changing pattern of participation in the labor force.
- (b) To consider methods of aiding school guidance counselors in helping girls acquire a more realistic view of their futures--so they may gear their lives to new educational and vocational opportunities and develop their full capacities.

Six State school guidance officials attended the conference, as well as the Special Consultant to the Secretary of Labor for Youth Employment, and representatives from the HEW's Office of Education, OMAT, and the Women's Bureau.

Status of Project:

The conference was held July 20-21, 1964, and a preliminary report has been submitted.

Highlights of Findings:

Because of their different life patterns, the counseling of girls is different from the counseling of boys. Moreover, the employment outlook for girls has changed more than that of boys in recent decades. As a result, the conference concluded that outdated attitudes toward women's work role should be critically re-examined in light of the current facts. Counselors and counselor-educators need help in revising their approach to counseling girls.

In addition, the conference stressed that girls need to accept the probability that they will play a dual role as homemakers and paid workers for a large portion of their lives and be helped to realize their fullest potential in both capacities. To this end it is important to influence parents, elementary school teachers and counselors, and community leaders and organizations.

Contract No.: OFMS 3

Project Title: ONE-THIRD OF A NATION: A Report on Young Men Found Unqualified for Military Service

An interdepartmental project under the chairmanship of the Secretary of Labor and involving the Departments of Labor; Defense; Health, Education and Welfare; and the Selective Service System.

Objectives and Procedures:

The President's Task Force on Manpower Conservation was directed to prepare a program for the guidance, testing, training, and rehabilitation of youths found disqualified for military service.

As part of their responsibilities, the Task Force studied the military service examination process and the resulting statistics on rejections. It developed information on the characteristics of rejectees and on their need for further assistance.

Status of Project:

A report entitled One-Third of a Nation was published January 1, 1964, and distributed widely.

Highlights of Findings:

One-third of all young men in the nation turning 18 would be found unqualified if they were to be examined for induction into the Armed Forces. Of these, about one-half would be rejected for medical reasons. The remainder would fail through inability to qualify on the mental test.

Although many persons are disqualified for defects that probably could not be avoided, the majority appear to be victims of inadequate education and insufficient health services. A nationwide survey carried out by the Task Force, of persons who have recently failed the mental test, demonstrated that a major proportion of these young men are the products of poverty.

Program Applications:

The United States Employment Service and the Selective Service System have launched a program to rehabilitate the rejectees whose employment and educational problems were brought to the attention of the Nation by the report One-Third of a Nation. Through June 1964, more than 164,000 rejectees were notified of the availability of local employment office services to assist them in various ways. Out of 28,600 who reported for interviews at local public employment offices, 6,600 referrals were made and 3,100 placements resulted. Assistance offered to rejectees included counseling (16,800), testing (4,100), development of job contacts (3,500), and referrals to training (328).

NATURE AND CONDITIONS OF EMPLOYMENT
AND UNEMPLOYMENT—FACTORS AFFECTING
JOB FINDING AND PLACEMENT

Mobility

Contract No.: OAM 5-63 (F)

Project Title: International Differences in Factors Affecting
Labor Mobility--Inter-industry, Occupational and
Geographical: Selected Countries of Western
Europe

Contractor: International Labor Organization
Geneva, Switzerland

Principal Staff: Ralph H. Bergmann, Chief, Automation Unit

Objectives and Procedures:

The objectives of this study are to ascertain international differences in degrees of inter-industry, occupational and/or geographic labor mobility, and to explain these differences by relevant economic and institutional factors.

Information about labor mobility and turnover will be obtained from two groups of firms from selected countries and from workers in these firms. Indicators of the degree of labor mobility will be constructed. The influence on labor mobility of employer organizations, labor unions, and government policies will also be studied.

Status of Project:

This study is expected to be completed by the end of 1964.

Contract No.: MDTA 18-63

Project Title: Impediments to Labor Mobility

Contractor: Reed C. Richardson, Professor of Economics, University of Utah, Salt Lake City, Utah

Principal Staff: Dr. Reed C. Richardson, Professor of Economics, University of Utah, Salt Lake City, Utah and
Dr. J. Kenneth Davies, Associate Professor, Brigham Young University

Objectives and Procedures:

This study has been designed to investigate the factors that impede the movement of workers from a specific area of high unemployment to nearby areas where job opportunities exist. While results will be of primary value as an aid in the solution of the local unemployment problem, they may also be expected to provide some information which may be useful in establishing and administering national programs to increase mobility.

The study has been conducted in Utah County, Utah. This is a labor area dominated by a plant in which employment has been declining since 1957.

A sample has been drawn of about 500 family heads and unmarried workers who were either long-term unemployed, or who had experienced long periods of unemployment (other than seasonal) over the previous year and a half. Interviews have been conducted to determine personal characteristics, training skills, experience, and any general obstacles to mobility.

Employment opportunities in a 500-mile radius have been investigated and workers for whom job matches were found were re-interviewed to determine the reason for their failure to move and possible incentives that might induce them to relocate.

Analyses being made will attempt: (a) To identify the major obstacles to mobility, (b) to determine differences in the importance of the various mobility impediments for workers with varying skills, demographic and social characteristics, and, (c) to ascertain the kinds of incentives which might encourage desirable mobility.

Status of Project:

The final report is in preparation and scheduled for completion late in 1964.

Contract No.: MDTA 1-63 (A)

Project Title: Severance Pay Plans in Operation

Contractor: Bureau of Labor Statistics, U.S. Department of Labor,
Washington, D.C.

Principal Staff: Harry P. Cohany, Chief, Branch of Collective
Bargaining and Union Activities

Objectives and Procedures:

This project is concerned with the operational aspects of severance pay plans, with particular attention being given to their effects on the mobility of displaced workers. Aspects of the plans which tend to impair the plans' usefulness in promoting desirable mobility, and experiences which have contributed to extending their benefits have also been considered.

Analyses have been made of the returns from mail questionnaires sent to both company and union officials involved in about 500 severance pay plans covered by major collective bargaining agreements. The questionnaire probed such areas as: the amounts paid out, the reasons for job terminations, the kinds of employees involved, and aspects of the plans that have helped workers find new jobs, learn new skills, or move to new locations.

Case studies have been made of selected significant plans and situations in action.

Status of Project:

Data collection and analysis have been completed. A final report is expected late in 1964.

Contract No.: MDTA 1-63 (B)

Project Title: The Effects of Private Pension Plans on the Mobility of Workers (Vesting and Early Retirement Provisions)

Contractor: Bureau of Labor Statistics, U.S. Department of Labor, Washington, D.C.

Principal Staff: Donald M. Landay, Chief, Branch of Employee Insurance, Welfare and Pension Plans

Objectives and Procedures:

This project is concerned with the effects that pension plans have on the mobility of workers.

The study has two major aspects: (a) A description of the private pension structure in its entirety, and (b) an analysis of the implications of these provisions and practices for labor mobility and future mobility studies.

It is based on intensive review of a stratified random sample of pension systems selected from the 16,000 reports filed under the Welfare and Pension Plans Disclosure Act.

Status of Project:

The study results have been published in BLS Bulletin 1407 entitled, Labor Mobility and Private Pension Plans: A Study of Vesting, Early Retirement, and Portability Provisions.

Highlights of Findings:

The study shows that only a minority of American workers are now covered by private pension plans; that most such plans are of relatively recent origin; that they are concentrated in certain occupational groups and industries.

Vesting provisions were found in two-thirds of the plans with three-fifths of the total pension plan coverage, but in general the provisions were not effective until the worker had achieved middle age and lengthy employment with the firm. Early retirement provisions were found in three out of four private plans but like the vesting provisions, were limited in their applicability to older workers with long years of service.

The report points out that because of the youth of the pension movement and the manner in which it has evolved, the full impact of pensions in workers' attitudes and mobility has probably not yet been felt. It also indicates that restricting and limiting features of vesting and early retirement provisions as they actually exist must not be overlooked when evaluating the extent to which such clauses may influence worker mobility.

Contract No.: MDTA 14-63

Project Title: Training Implications of Job Shifts from Blue-Collar to White-Collar Employment

Contractors: The Regents of the University of Wisconsin (Industrial Relations Research Center), Madison, Wisconsin

Principal Staff: Dr. James Stern, Professor of Economics and
Dr. David Johnson, Professor of Economics

Objectives and Procedures:

This study seeks to develop information on the extent and characteristics of shifts from blue-collar to some selected white-collar occupations.

A sample of about 500 workers in the Milwaukee metropolitan area who have made such shifts during the last 5 years will be interviewed. Analyses will be made to determine: (1) patterns of job shifts, (2) skill cores which are transferable, (3) training or skill acquisition processes used by successful shifters, and (4) correlations of such shifts with personal characteristics and attitudinal and behavioral variables.

Analyses will also be made of interviews with personnel officers in a stratified sample of employing units in Milwaukee to determine their attitudes concerning employing former blue-collar workers in white-collar jobs. Factors to be considered include: (1) attitudes and practices toward hiring or promoting blue-collar workers, (2) occupational linkage patterns, (3) skill transferability, and (4) variables which in their experience affect the success of shifts from blue to white collar jobs.

Status of Project:

The survey of sample firms to determine the extent and direction of blue-to white-collar shifts in the Milwaukee labor area has been completed; the workers to be surveyed have been selected; and the questionnaire for the personal interview with these blue- to white-collar shifters has been prepared. It covers not only job experience but attitudes and other background information relating to these shifts such as vocational guidance received. Interviews will be conducted during the summer of 1964. Completion of the entire study is expected in 1965.

Contract No.: MDTA 24-64

Project Title: An Exploratory Study of the Mobility Effects of the Extension of Health and Insurance Benefits to Laid-Off Workers

Contractor: Bureau of Labor Statistics, U.S. Department of Labor, Washington, D.C.

Principal Staff: Donald Landay, Chief, Branch of Employee Insurance, Welfare and Pension Plans

Objectives and Procedures:

The study is intended to explore the mobility implications (in terms of impeding or facilitating job mobility) of extending health and insurance benefit coverage to laid-off workers.

Based on case studies of 15 firms, information will be developed on the mobility implications of health and insurance programs by use of: (a) Interviews of labor, management, and insurance officials (affiliated with the insurance programs) for their experiences, data, and opinions on the mobility implications in the extension of health and insurance coverage to laid-off workers, and (b) interviews with a random sampling of workers laid off in each of 15 companies, probing the use of such benefits during layoff and how the benefits affected the workers' mobility decisions.

Status of Project:

The project is in its final stage of development and should be initiated shortly. Completion date is presently set for late 1965.

NATURE AND CONDITIONS OF EMPLOYMENT
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Counseling and Guidance

Contract No.: MDTA 14-64

Project Title: A Study of the Need for Work Adjustment and Social Work Assistance for the Long-term Unemployed

Contractor: The City of Philadelphia, Manpower Utilization Commission
Philadelphia, Pennsylvania

Principal Staff: John L. Culp

Objectives and Procedures:

Emotional, psychological, and motivational factors are believed to incapacitate the very long-term unemployed individual so that he can neither participate in the world nor benefit from vocational training or retraining. It is also believed that these incapacities can be overcome through specific pre-vocational experience consisting of work adjustment or social work assistance or a combination of both.

The project will:

(a) Determine the proportion of the long-term unemployed needing these special services;

(b) Determine if the specific programs of assistance offered in this project significantly improve the employability and trainability of these persons; and,

(c) Evaluate the costs and benefits achieved by this program.

The research method involves the selection of a sample of long-term unemployed persons in the city of Philadelphia and the determination of the need for: (a) work adjustment counseling, (b) social work assistance, and (c) a combination of both services, for each person in the sample. The groups referred to each of the three programs will then be divided equally, one half being provided the required service and the other half serving as a control group. Comparison of the success in training and post-training employment of those receiving the special service with those not receiving it is expected to indicate the efficacy of the special pre-vocational programs.

Status of Project:

Progress reports are to be submitted at various stages of the project, with the final report scheduled for mid-1966.

Contract No.: MDTA 19-64

Project Title: Vocational and Occupational Guidance in the Sixties
and Seventies

Contractor: Tuskegee Institute, Tuskegee, Alabama

Principal Staff: Dr. P. Bertrand Phillips, Dean of Students

Objectives and Procedures:

To promote interest in the development of a meaningful vocational guidance program for Southern youth, a 2-day institute and project conference was conducted for high-school principals and guidance counselors from seven Southern States.

Status of Project:

The workshop was held May 8-9, 1964. A report of the conference, including comments of the participants; an evaluation of the conference in terms of its stated objectives; recommendations for improving vocational and occupational information and its dissemination; and an evaluation of the extent and effectiveness of the followup activities intended to result from the conference, is scheduled for late 1964.

NATURE AND CONDITIONS OF EMPLOYMENT
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Training and Retraining

Contract No.: MDTA 39-64

Project Title: A Study of the Distinguishing Characteristics of Workers Eligible for Consideration for Training Programs and Their Success or Failure in the Selection and Training Process

Contractor: Rutgers - The State University
New Brunswick, New Jersey

Principal Staff: Dr. Jack Chernick

Objectives and Procedures:

This project will identify the characteristics of individuals eligible to receive MDTA training, and determine to what extent these characteristics cause them to fall into the following categories:

- (1) Unemployed persons who have not in any way manifested an interest in training.
- (2) Persons who have indicated an interest in training and who:
 - (a) enter training and successfully complete the course;
 - (b) enter training and terminate before completion; or
 - (c) do not enter training at all.

Once these characteristics are known, specialized training instruments and techniques could be applied to raise the interest and ability of those people who are unsuccessful at selection or training to a level at which they are capable of benefiting from MDTA programs.

The sample to be studied will consist of about 3,400 persons representing the various categories of persons described above, selected at random from the records of the New Jersey State Employment Service Offices in Newark, New Jersey. Pertinent data will be collected from existing records on the 3,400 individuals and will be supplemented by interviews in depth with about 400 persons.

Information will be analyzed on demographic characteristics, occupational training and experience, attitudes toward work and job-finding processes, mobility attitudes, characteristics of aptitudes, physical limitations, and other pertinent data.

Status of Project:

This project is expected to be completed by mid-1965.

Project No.: MDTA 17-63

Project Title: Attitude Survey of Manpower Development and Training Act Trainees

Contractor: University of Michigan, Ann Arbor, Michigan
(Contracted for by the Department of Health, Education and Welfare through a transfer of funds from the Office of Manpower, Automation and Training)

Principal Staff: Dr. Gerald Gurin

Objectives and Procedures:

This study seeks to evaluate the attitudes and motivation of MDTA trainees. Information will be sought from 6,000 MDTA trainees, 2,000 by interviews and 4,000 through the use of a questionnaire given by the instructor of the course. Trainees will be questioned on their attitudes toward the MDTA program--their satisfaction with teaching methods, their perception of the relevance of instruction to work experience, their reactions to past unemployment, and their rating of the skills for which they are being trained compared with previous skill levels.

Analyses will be made to compare changes in attitudes and motivation over time: when they enroll, when they complete or leave the program, and 6 months after training is completed. The trainees' post-program job history, including relevance of training to subsequent employment and to effectiveness of job performance, will be related to attitudinal and motivational changes, to certain demographic characteristics of the trainees, to their mobility history, and to previous labor force experience.

Ratings of trainees' performance in post-training jobs will also be sought from the supervisors of about 1,000 of the trainees.

Personal interviews are to be used to validate data obtained from the self-administered questionnaire and to explore certain variables in greater depth.

Status of Project:

A final report is due by the end of 1965.

Contract No.: MDTA 8-63

Project Title: Retraining and Labor Market Adjustment in
Western Europe

Contractor: Dr. Margaret S. Gordon, University of California
Berkeley, California

Principal Staff: Dr. Margaret S. Gordon

Objectives and Procedures:

Dr. Margaret Gordon conducted extensive interviews with labor officials in Belgium, France, West Germany, Italy, The Netherlands, Sweden, and The United Kingdom. The purpose of her study has been:

- (a) To discover what can be learned from the European retraining programs that may be of value in relation to American retraining problems.
- (b) To develop a clearer notion of the role of retraining in relation to other economic and manpower policies.

Status of Project:

A preliminary report, Retraining and Labor Market Adjustment in Western Europe,* has been released. Two additional chapters are to be submitted by November 1, 1964, after which the complete report will be published as a book.

Highlights of Findings:

The study concludes that the U. S. should move toward an official policy of maintaining an occupational retraining program as a permanent instrument of manpower policy. A careful distinction is made between training for economic objectives, for which the efficiency of the training process may be measured, and training for the social objectives of providing opportunities for disadvantaged groups. In comparing training allowances in Western European countries with those given under the Manpower Development and Training Act, the researcher concludes that MDTA allowances are inadequate. The study also indicates that European countries are further along toward developing an early warning system for unemployment and toward developing policies for the prevention of unemployment. While recognizing that government training and retraining programs are not a substitute for economic growth in overcoming the unemployment problem, the study emphasizes, on the basis of European experience, that retraining can make a significant contribution to the solution of this problem.

Contract No.: MDTA 8-64 (9-63)

Project Title: Measuring the Benefits and Costs of Retraining Programs for Unemployed Workers

Contractor: School of Labor and Industrial Relations
College of Social Science
Michigan State University
East Lansing, Michigan

Principal Staff: Dr. Einar Hardin, Associate Director for Research (SLIR), and Associate Professor of Economics

Dr. Sigmund Nosow, Research Associate (SLIR), and Professor of Social Science

Objectives and Procedures:

This study seeks to answer questions about the economics of retraining programs. An attempt will be made to determine whether there are net economic advantages of retraining to the individual participants and to society as a whole.

Three estimates are to be developed:

- (a) Private benefits and costs to participating individuals;
- (b) Social benefits and costs, covering the impacts on the national economy; and
- (c) Budget impacts, covering changes in government tax receipts and expenditures.

Data on benefits will be collected largely from trainees and control groups by means of personal interviews which will also cover personal characteristics and socio-psychological variables related to the economic returns on retraining expenditures. Most of the cost elements will be estimated from information to be provided by educational institutions and government agencies.

Status of Project:

Interview schedules have been developed and approved, and interviewing is underway. Completion of the study, including the issuance of a final report, is scheduled for mid-1966.

Contract No.: MDTA 35-64

Project Title: A Pilot Study of the Use of Area-of-Interest Self Instructional Reading Courses Among Young Persons Considered to be Neither Self-Motivated nor Self-Supporting

Contractor: U.S. Industries, Inc., Educational Science Division, Silver Spring, Maryland

Principal Staff: Dr. Richard E. Walther, Director

Objectives and Procedures:

An attempt will be made to develop self-instructional reading courses that will motivate young persons who are not self-supporting and who have minimal vocational interests as well as reading ability no higher than that required at the beginning of the fifth grade, to improve their reading skills and to take advantage of training, retraining, or normal employment procedures.

The study will be conducted in cooperation with Action for Boston Community Development, Inc. which will arrange for 100 to 150 young persons, aged 16 to 21 years, to be used in the development of the reading courses. About 65 to 75 young persons will be utilized in the final testing phase, which will indicate whether the program as a whole meets the stated objectives. Apparent success will be measured by the rate of dropouts from the training program, the improvement in reading vocabulary, the increase in employment in positions for which test subjects could not previously qualify, and an increased interest in training programs and placement services or other normal employment procedures.

It is anticipated that the end result will include, in addition to the research report, an automated self-instructional reading program that can be subjected to further testing and evaluation to determine its effectiveness in comparison with other methods designed to achieve similar objectives.

Status of Project:

The study is scheduled for completion in mid-1965.

Contract No.: MDTA 44-64

Project Title: Preparation of an Annotated Bibliography of
Research Related to Unemployment and Retraining

Contractor: Laboratory for Research in Social Relations,
University of Minnesota, Minneapolis, Minnesota

Principal Staff: Dr. Elliot Aronson, Associate Professor of
Psychology

Objectives and Procedures:

The objective of this study is to compile a critical and evaluative annotated bibliography of all research related to workers' attitudes regarding employment and unemployment. This includes attitudes about job satisfaction, unemployment compensation, retraining (necessitated by technological unemployment), et cetera. The research included is to be summarized and evaluated critically in terms of the criteria of scientific merit.

Status of Project:

This project is expected to be completed by late 1965.

NATURE AND CONDITIONS OF EMPLOYMENT
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Special Problem Groups

Contract No.: MDTA 18-64

Project Title: Restoration of Youth Through Training

Contractor: Staten Island Mental Health Society, Inc.
Staten Island, New York

Principal Staff: Dr. Sol Chaneles, Study Director
Dr. Gerald R. Ehrlich, Assistant Study Director
Jacob Ross, Assistant Research Director

Objectives and Procedures:

A training program being undertaken and financed by the New York City Department of Correction will give occupational training before release of 150 youthful offenders aged 18-21 years. The research study is concerned with the implications of such training for the future careers of delinquent youth. The experimental group will receive training as operators of electronic data processing equipment. The training will be on a full-time 6 day-a-week schedule combining job training, classroom instruction in literacy training, and self-management counseling.

Placement services, counseling and guidance, and family referral services will be given the experimental group during the post-release period, and the experience of this group will be compared with that of a control group of 150 volunteers. Both the experimental group and the control group must be able to pass an aptitude test designed for electronic data processing jobs.

The implications of this training program for other correctional institutions will receive careful study.

Status of Project:

The final report is due in June 1965.

Highlights of Findings:

1. The great majority of trainees appear to be capable of learning IBM machine skills and to attain proficiency in the use of the various machines.
2. The reading program already indicates that a 2-month intensive remedial reading class significantly improves the reading skills of this type of adolescent.
3. Though information is not conclusive as yet, fewer trainees return to prison than do the non-trainee controls.
4. Of those released, the great majority are still in the community, and of these most have been placed in positions for which they were trained.
5. Employer resistance is high, but a significant number have shown a willingness to cooperate with program personnel.
6. Few social agencies deal with the specific needs of the project's population, reflecting the chronic inadequacy in community services.

Contract No.: MDTA 15-63

Project Title: National Conference on Problems of Rural Youth in a Changing Environment

Contractor: National Committee for Children and Youth (NCCY)
Washington, D. C.

Principal Staff: Mrs. Isabella J. Jones

Objectives and Procedures:

The NCCY held a conference at Oklahoma State University, Stillwater, Oklahoma, from September 22-25, 1963. Some 350 participants, including national, State and local professional and lay leaders, met to develop recommendations on programs to deal with significant social and economic problems of rural youth. A principal purpose was to alert the Nation to the complex problems faced by rural youth and to stimulate research and action programs.

Conference participants met in 20 work groups of approximately 25 persons each to discuss such topics as:

- a) New Dimensions of Vocational Education for Rural Youth,
- b) Realistic Appraisals of Employment and Necessary Preparation to Fulfill Job Opportunities,
- c) The Economic Base and Potential of Rural Communities,
- d) Improving Community Awareness of the Situation of Rural Youth,
and
- e) Special Problems of the Children of Migrant Workers.

As a follow-up to the Conference, it is hoped that regional workshops will be held to highlight specific problems.

Status of Project:

The background papers prepared for this Conference will be reprinted in two volumes which are scheduled for publication in late 1964. A separate volume which will include the proceedings of the Conference, the recommendations developed in working sessions, and a listing of ongoing action programs for rural youth at the local level will also be published.

Contract No.: MDTA 7-64

Project Title: A Study of the Adjustment by Employers, Unions, and Workers in Twenty Selected Firms to the Employment of Negro Workers in New Jobs

Contractor: Institute of Labor and Industrial Relations, University of Michigan-Wayne State University, Detroit, Michigan

Principal Staff: Dr. Louis A. Ferman, Project Director

Objectives and Procedures:

This project is concerned with:

- (1) Discovery of the problems that arise when an equal employment program is applied in a given industry.
- (2) Eliciting detailed information on the practices, procedures, and experiences of business concerns in developing and applying an equal employment program and the experiences of unions and workers in this process.

The methodology will involve personal interviews with employers, unions, and Negro and white workers in 20 selected business firms that (1) are located in industries with high employment potential, (2) instituted an equal employment program in 1960 or 1961, and (3) have a work force composition that represents a wide variety of occupations ranging from unskilled jobs up through top executive levels. Evaluation will be made of the equal employment policies, programs, and procedures of the firms and, where possible, patterns of experience prevalent among the companies will be identified.

In addition, the 20 case studies will be supplemented by an intensive study of a single case over a 12 month period.

A report of the findings in this study setting forth an analysis of procedures and practices--both successful and unsuccessful--should furnish valuable guidelines for the development of future programs of non-discrimination in employment.

Status of Project:

The 20 companies are being selected and the interviewing should begin during the summer of 1964. The project should be completed late in 1965.

Contract No.: MDTA 16-63

Project Title: A Study of the Employment of Retired Military Personnel
with Specific Reference to Retraining

Contractor: Bureau of Social Science Research, Inc., Washington, D. C.

Principal Staff: Laure M. Sharp, Study Director
Dr. Albert D. Biderman, Associate
Frank G. Davis, Research Analyst
John R. Taylor, Associate

Objectives and Procedures:

Over 50,000 Armed Forces retirees enter the labor force annually. This study is investigating the transition from military to civilian careers of all retirees during a single month (May 1964) in order to identify problems in utilizing their skills and to determine possible needs for retraining. Detailed information is being developed from a sub-sample of 300 job-seeking retirees regarding how the transition takes place. Members of the sub-sample report their contacts with employment assistance organizations and prospective employers. Selected employees and job counselors are then queried to determine how the job seeker was evaluated. The group is being studied by two mail questionnaires--the first distributed immediately prior to retirement and the second, 4 months after retirement. The report will provide information useful to private and governmental programs of counseling, training, and information for current and future military retirees. The study may also suggest considerations relevant to the broader phenomenon of the "second career."

Status of Project:

The pre-retirement questionnaire has been completed, the intensive 15-week study of job-seeking is underway, and the post-retirement follow-up questionnaire has been written. The study is scheduled to be completed in spring of 1965.

Highlights of Findings:

A pre-test of the survey questionnaires indicated that practically all military retirees plan second careers: only 3 of 128 respondents were not planning to join the labor force. Despite optimism regarding their ability to fit into the civilian labor force, few of the men had made any preparation for retirement. Plans for a career were usually postponed until a few months prior to separation from the services, and a large proportion of the group had not planned even an occupational choice. Few of the men had had formal training for civilian jobs, but most of them were confident that on-the-job training alone would enable them to adapt military skills to a suitable civilian job. The men expressed a desire for more job information and counseling. Preliminary results indicate that military retirees may be faced with difficulties they had not anticipated in finding civilian employment, and that a major counseling and retraining program is essential.

Project No.: BES-AA-63-4-1

Project Title: Collection and Analysis of Information Regarding Employment of Older Workers

Contractor: Bureau of Employment Security, U. S. Department of Labor, Washington, D. C.

Principal Staff: Anthony J. Fantaci

Objectives and Procedures:

Surveys were conducted to obtain up-to-date information for use in the report of the President's Council on Aging. One study examined the extent to which arbitrary age specifications appeared in job orders placed with public employment service offices. Over 25,000 job orders placed with local offices were reviewed in eight cities in States which do not prohibit discrimination because of age.

Another survey covered the factors associated with age restrictions in employment. Employers were asked to compare employees over 40 years of age with those under 40, and to rate them on a number of performance characteristics including absenteeism, quality and quantity of work, accident proneness, physical ability, and adaptability to change.

Status of Project:

These surveys were completed in October 1963 and were used in report of the President's Council on Aging and in the 1964 Manpower Report of the President with its accompanying report by the Secretary of Labor.

Highlights of Findings:

An analysis of the 25,000 job orders showed that 29 percent restricted hiring to persons under 45 years of age and almost half to persons less than 65 years. Variations were found among cities, industries, and occupations with age limitations found most frequently in clerical, sales, and professional and managerial jobs. Among 9 out of 10 performance characteristics analyzed, employers rated older workers as equal to or better than younger workers. The reason most frequently cited as a factor in limiting the hiring of workers over 40 years old was inability to meet physical requirements of the job. This was followed by pension and insurance costs, lack of adaptability to change, lack of specific skills, and salary requirements.

Contract No.: MDTA 11-64

Project Title: The Educational and Vocational Rehabilitation of
the Hard Core Unemployed

Contractor: South Bend Community School Corporation
Division of Adult and Vocational Education
South Bend, Indiana

Principal Staff: Robert C. Riley, Director
Adult and Vocational Education

Dr. Nathaniel J. Pallone
Research Director (Project Coordinator)

Ruth M. Bell
Staff Social Worker (Counselor)

Objectives and Procedures:

The objectives of the project are: (1) to provide basic educational skills (especially language and arithmetic) for 100 hard-core unemployed workers and to assist them in the development of favorable work attitudes; (2) to determine the educational, social, and attitudinal characteristics of hard-core unemployed workers amenable to the development of educational and vocational skills and appropriate work attitudes; and (3) to explore instructional techniques most appropriate to these purposes. Subjects receive 36 weeks of educational skills improvement training, including both individual and group guidance, focusing on self-as-worker. Subsequently, they receive 16 weeks instruction in appropriate vocational training.

Status of Project:

The final report is scheduled for mid-1965.

Highlights of Findings:

The principal findings thus far relate to the selection of appropriate instructional material and to the unexpectedly large number of enrollees whose educational skills improved sufficiently in a period of from 12 to 18 weeks to permit them to enter vocational training. The typical reading and language arts level of enrollees when entering training was approximately second grade level. The typical arithmetic performance was third grade level. Dramatic increases, often as much as six grades equivalent (i.e., movement from second to eighth grade levels) are evidence of the success thus far. In addition, a survey of the educational and social histories of enrollees is being prepared from interview data. These factors will be related statistically to success in vocational and educational training.

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Other

Contract No.: MDTA 43-64

Project Title: A Study to Measure Disguised Unemployment

Contractor: George Akerlof, Massachusetts Institute of Technology,
Cambridge, Massachusetts

Principal Staff: George Akerlof

Objectives and Procedures:

This study represents an attempt to measure the relation between the level of labor force participation and economic conditions in each State. It will provide a rough indication of the number of persons who would be working if good employment opportunities were available.

Status of Project:

The results of this project are expected by late 1964.

Contract No.: MDTA 12-63

Project Title: A Study of Factors in Workers' Decisions to Forego Retraining

Contractor: Norfolk Division, Virginia State College
Norfolk, Virginia

Principal Staff: Dr. William F. Brazziel, Director
Division of General Education
Norfolk Division, Virginia State College

Objectives and Procedures:

This study was designed to explore the psychological and sociological factors which influenced unskilled, unemployed workers to enter or forego retraining. Personal interviews were conducted with 314 workers in the Norfolk area, including those who enrolled in, and those who rejected MDTA training.

Status of Project:

The final report, Factors in Workers' Decisions to Forego Training Under the Manpower Development and Training Act,* was submitted to OMAT in May 1964 and has been distributed.

Highlights of Findings:

An analysis of the interviews, which were conducted before the 1963 MDTA amendments, revealed that the most important factors influencing those who rejected MDTA training were low training allowances, limitations on outside earnings during training, length of the training program, and insufficient communications with prospective trainees. The influence of these factors was particularly strong for workers without military service or other experience outside the immediate geographic area.

Program Applications:

Representatives of the college testified before the Select Subcommittee on Labor of the Committee on Education and Labor of the House of Representatives, basing some of their recommendations on the findings of this research project. A number of their recommendations were reflected in the amendments to the MDTA adopted in December 1963.

Material is being prepared by the Department for distribution to local Employment Services based on this study. This material suggests that long-range information programs be initiated to facilitate community understanding of retraining programs. It also suggests new types of recruiting techniques to reach uneducated and unskilled workers.

Contract No.: MDTA 5-64

Project Title: Evaluation of Training and Recruitment Problems for
Selected Technical Occupations in Short Supply

Contractor: Institute of Labor and Industrial Relations
The University of Illinois
Champaign, Illinois

Principal Staff: Dr. Walter H. Franke
Associate Professor of Labor and Industrial Relations

Objectives and Procedures:

Severe occupational shortages exist in areas where there are also high levels of unemployment. Many of these shortages are in technical occupations requiring considerable training. This study is designed to provide understanding that will help achieve more rational adjustments to occupational changes.

Six key technical occupations in which there are critical shortages of workers are being studied to determine the causes of these shortages and the effectiveness of current labor market processes and institutions in removing or lessening these shortages.

Status of Project:

One-third of the interviews with employers and workers have been completed. A final report on the project is expected in mid-1965.

Contract No.: OAM 5-63 (G)

Project Title: International Comparison of Procedures for
Dealing with Unemployment in Selected Countries
in Europe

Contractor: International Labor Organization
Geneva, Switzerland

Principal Staff: N. Franklin, Chief
Economic Division

Objectives and Procedures:

This project will survey methods for handling unemployment problems in selected European countries and will attempt to explain differences in the relative efficiency of these procedures.

The study will analyze the economic characteristics of industries in which employment has been contracting. Surveys will be made to describe measures to cope with surplus labor, and to assess the relative importance of individual measures and the relative efficiency of national practices as between countries. The similarities and differences in the extent and form of government involvement in these problems will also be analyzed.

Status of Project:

Completion of this project is scheduled for fall 1965.

Contract No.: MDTA 6-64

Project Title: The Search for Jobs (An Inter-disciplinary Study of
How Blue- and Selected White-Collar Workers Seek Work)

Contractor: The W. E. Upjohn Institute for Employment Research

Principal Staff: Dr. Harold L. Sheppard, Principal Investigator
Dr. A. Harvey Belitsky, Economist
Dr. Lawrence Littig, Psychologist

Objectives and Procedures:

This study is concerned with the social, psychological, and economic factors that affect the job-seeking behavior of blue-collar and selected groups of white-collar workers.

Depending on results in the first area to be studied, behavior patterns of job seekers will be investigated in one to three communities with high or moderate rates of unemployment. If three areas are studied, two will be in the high unemployment bracket. Information will also be sought from key company officials, community leaders, union representatives, and private employment agencies on patterns of recruitment and the methods of communicating job vacancy information.

Characteristics of job finders and non-job finders will be studied, as well as the effects of community employment programs on local employment and recruitment.

Status of Project:

The surveys of office machine operators and blue-collar workers in the first area selected for study, Erie, Pennsylvania, are scheduled for summer 1964. The entire project should be completed late in 1965.

NATURE AND CONDITIONS OF EMPLOYMENT AND
UNEMPLOYMENT—EMPLOYMENT

Contract No.: MDTA 10-64 (MDTA 13-63)

Project Title: Manpower Resources and Economic Growth

Contractor: The Trustees of Columbia University, New York, New York

Principal Staff: Dr. Eli Ginzberg, Director of the Conservation
of Human Resources Project
Dr. Dale L. Hiestand, Project Director
Dr. Beatrice Reubens, Research Economist
Dr. Harry Greenfield, Research Economist
Dr. James Kuhn, Research Associate

Objectives and Procedures:

The objective of this study is to identify and analyze sectors, or "growth constellations," in the economy to determine the role of manpower resources in the expansion of the economy.

Three studies have been planned. The first will concentrate on industrial, occupational, and geographical analyses to facilitate the identification of "growth constellations." The second will explore, through case studies, the role of available trained manpower as a determinant of economic growth. The third will analyze the amount of employment offered by the nonprofit sector.

Status of Project:

A draft manuscript on The Pluralistic Economy should be available early in 1965. The draft of the first case study on Manpower Resources and Nuclear Power is expected at the end of 1964. A second case study on The Expansion of Business Services is underway. Work has also begun on the study of "growth constellations," entailing a review of public and private activities directed toward expanding employment. The entire project is scheduled to be completed in late 1965.

Highlights of Findings:

An adequate model of the economy must make provision for institutions other than government in the nonprofit sector. Together these sectors accounted for seven out of eight new jobs between 1950 and 1960. A more adequate model of the economy would provide new directions for policy with respect to manpower development and utilization.

The study of nuclear power emphasizes the crucial role of highly qualified personnel in the development of a new technology. Failure to secure an adequate core of such personnel could result in excessively high costs of development.

The study of the increasing importance of business services emphasizes the growing tendency of employers to reduce their regular manpower requirements by contracting for such services. In turn, the key to the expansion of business services enterprises has been their specialization in manpower at different levels--from cleaners to management consultants.

Contract No.: MDTA 31-64

Project Title: Research Conference on the Measurement and Interpretation
of Job Vacancies

Contractor: National Bureau of Economic Research; New York, New York

Principal Staff: Dr. Geoffrey H. Moore

Objectives and Procedures:

The National Bureau of Economic Research will conduct a conference in April 1965 designed to stimulate research on job vacancies and the problems of regularly compiling job vacancy statistics. The NBER will prepare and publish proceedings of the conference. Tentatively, the agenda will include papers and/or discussion in the following areas:

- (a) Needs for and uses of data for measuring the current demand for labor.
- (b) Conceptual problems of job vacancy measurement.
- (c) Other approaches to measuring the current demand for labor.
- (d) Empirical studies of job vacancies in the United States.
- (e) Empirical studies of job vacancies in other countries.

Status of Project:

Preparations are being made for the conference, and the published proceedings should be available by late 1965.

Contract No.: MDTA 16-64

Project Title: Formulation of a Regional Manpower Development Program
for the Upper Peninsula of Michigan

Contractor: Northern Michigan University, Marquette, Michigan

Principal Staff: Dr. Kenneth L. Parkhurst

Objectives and Procedures:

The major objectives of the study are the development, demonstration, and evaluation of techniques and procedures for the construction of a regional manpower program which may serve as a model for other regions with similar problems.

The study will identify regional manpower demands for future economic growth for the years 1970 and 1975 in relation to independently developed economic projections for the Upper Peninsula of Michigan. Estimates of these implicit manpower requirements will reflect expected industry growth and changes in labor force productivity and will be presented by industry divisions and occupations. Since unemployment in the Upper Peninsula has averaged much higher than national rates in recent years, the relative movements of total employment opportunities and available labor force resources will be given special attention. Among the factors to be studied are the effects of migration and other demographic phenomena and the proportion of the population expected to seek employment.

Employment estimates developed under this project are expected to provide the basis for evaluating the adequacy of training resources in the peninsula. In addition, this project will identify the role that continuing local institutions, such as regional universities, can play in the analysis and implementation of a regional manpower development program.

Status of Project:

Work is to begin in fall 1964; and is scheduled for completion late in 1965.

**NATURE AND CONDITIONS OF EMPLOYMENT AND
UNEMPLOYMENT—UNEMPLOYMENT**

Contract No.: MDTA 20-64

Project Title: Seasonality in Employment and Unemployment:
Its Patterns, Trends, and Significance

Contractor: Bureau of Labor Statistics, U. S. Department of Labor
Washington, D. C.

Principal Staff: Robert L. Stein, Chief
Division of Employment and Unemployment
Labor Force Analysis
Carol B. Kalish
Jane L. Meredith

Objectives and Procedures:

The study is intended to determine the nature and extent of seasonal factors in contributing to employment and unemployment and to examine the possibility of dampening seasonal fluctuations in employment and unemployment. Seasonal patterns in employment and man-hours in nonagricultural establishments were examined by industry. Trends over the postwar period were also reviewed.

Status of Project:

The project has been completed, and the information will be used in the 1965 Manpower Report of the President.

Highlights of Findings:

Seasonal changes in employment within individual industries offset each other to a large degree, with significant wider seasonal swings at the detailed industry level than at mere aggregate levels. Although there has been some little change in seasonal patterns in detailed industries over the postwar period, there has been considerable stability in seasonality for total nonagricultural employment, total manufacturing and production-worker employment, and total manufacturing man-hours.

Only a little over one-fourth of the seasonal change in employment results in a change in the level of unemployment. The remainder of seasonal change is accounted for by expansion and contraction of the labor force and worker mobility among industries. Because seasonality is caused by weather or social or economic custom, and is therefore not easily reduced, a reduction of seasonal unemployment can come about only through programs which will stimulate demand, thereby shortening the off season, or which will facilitate placement of unemployed persons, thereby shortening their periods of unemployment.

Contract No.: MDTA 33-64

Project Title: Investigation of the Variables Associated With Unemployment Changes, Aimed at the Development of a Systematic Method for Short-Range Forecasting of Unemployment

Contractor: Dr. Stanley Lebergott, Department of Economics and Social Science, Wesleyan University, Middletown, Connecticut

Principal Staff: Dr. Stanley Lebergott

Objectives and Procedures:

The objective of the project is to examine the problems of developing a systematic procedure for forecasting unemployment rates for 3 to 6 months ahead; to make a preliminary exploration (a) to determine the most appropriate variables to include in a multiple regression model that could be used for the regular forecasting of unemployment, and (b) to derive trial results using selected variables. The eventual goal (which, however, is not within the scope of this study) is to develop a working model, in the form of a set of alternative equations, for forecasting both unemployment and employment by major industry 3 to 6 months ahead.

The project will involve a careful analysis of the variables which might provide a clue to future unemployment rates. Trial multiple regression equations will be formulated in which unemployment and changes in unemployment are estimated as functions of variables selected from the preliminary analysis. The variables will include, among others, the leading indicators designated by the National Bureau of Economic Research series showing the composition of the unemployed and data used in forecasts of the gross national product. A written report will be made, indicating the results of the above investigation, suggesting the most fruitful lines of further investigation, and including such preliminary equations as have been developed for testing particular variables and combinations of variables for suitability in developing a completed model.

Status of Project:

Completion of the project is expected in late 1964.

Contract No.: MDTA 40-64

Project Title: Special Work for the Manpower Report of the President (Income Maintenance Programs and Policies)

Contractor: Bureau of Employment Security, U.S. Department of Labor, Washington, D.C.

Principal Staff: Unemployment Insurance Service Staff

Objectives and Procedures:

The purpose of this project is to provide a section for the 1965 Manpower Report of the President and its accompanying report by the Secretary of Labor. The section will be concerned mainly with the unemployment insurance system, though it will take account also of other government and private programs designed to meet the income needs of unemployed workers. The function of unemployment insurance in bridging gaps in employment, thus preventing unnecessary occupational downgrading of workers and aiding the matching of men and jobs, will be indicated. The contributions unemployment insurance and other programs are making and should make to the total problem of meeting the income needs of unemployed workers (including but not limited to the long-term unemployed) will be explored. The relationship of these programs to adjustment to technological change, the reduction of poverty, and worker mobility will also be considered. The section will reflect the findings and recommendations of the Labor Department task force on unemployment insurance and the Presidential task force on income maintenance.

Status of Project:

Work on the project is underway and will be completed before the publication of the Manpower Report of the President in March 1965.

AUTOMATION

Contract No.: OAM 3-63

Project Title: The Nature of Automated Jobs and Their Educational and Training Requirements

Contractor: Human Sciences Research, Inc.
McLean, Virginia

Principal Staff: Dr. Sidney A. Fine

Objectives and Procedures:

- (1) To establish a means for defining and describing automated jobs.
- (2) To determine whether training and educational differences exist in the requirements for automated and non-automated jobs and, if possible, to measure the extent of these changes.
- (3) To determine whether interests, aspirations, and orientations of a sample of workers in related automated and non-automated jobs provide useful information for vocational guidance.
- (4) To evaluate the method and procedures of the study.

To achieve these objectives, 51 production and maintenance jobs were analyzed in the steel, electron tube, and computer industries; 132 workers were interviewed; and management personnel were sent detailed questionnaires.

Status of Project:

A revised final report is expected in fall, 1964.

Highlights of Findings:

The study indicates that automated jobs can be analyzed and classified according to their relative complexity and involvement with physical things, data, and people. Three kinds of automation were defined--according to whether they extended and/or replaced physical abilities, mental abilities, or a combination of both. The study suggests that the new automated jobs involving feeding or tending require no more, and in some cases, less education than the jobs they replace, but automated jobs which involve operating and tending and which are more "data oriented" generally require reasoning, mathematical, and verbal skills associated with a high school education. Most workers in this type of job believe that a high school education is both helpful and desirable. On the other hand, workers in "lower functional jobs" feel that a high school education is not necessary for their jobs. Management usually raises educational requirements for automated jobs. Automated jobs appear to require shorter training periods than the jobs they replace except in the maintenance and repair field.

Contract No.: OAM 4-63

Project Title: Management Decisions to Automate

Contractor: Stanford Research Institute, Menlo Park, California

Principal Staff: Dr. Harry V. Kincaid, Manager
Dr. Richard S. Roberts, Jr., Project Leader

Objectives and Procedures:

The principal objectives of this project are:

- (1) To determine what factors influenced managerial decisions to automate;
- (2) To compare the expectations and effects of automation, particularly as they affect the labor force; and
- (3) To draw conclusions from the case studies as to (a) the future of automation and (b) future effects upon employment.

The basis of the project was eight case studies in several firms involving management decisions to install electronic data processing in two banks, numerically controlled machines (a machine tool and a wiring machine) in two electronic manufacturing firms, and automatic order-picking and conveyor systems in four warehouses. The techniques used in obtaining information were written questions and answers; interviews with officials and staff and line personnel; and examination of company studies, correspondence, records, and reports.

Status of Project:

The Institute has completed the project and submitted its final report. A monograph based on the study is in preparation. The report, Management Decisions to Automate, was sent to selected libraries.

Highlights of Findings:

The major factor affecting the decision to automate appears to be cost reduction, particularly reduction resulting from increased labor productivity. Cost stabilization was a related factor affecting decisions to automate. Management was generally satisfied with the reductions in current operating costs following automation. The quantitative effects on the labor force in these companies were roughly as expected. The case studies suggest that new forms of automation spread slowly, although they can spread rapidly when they solve major industry-wide problems.

Contract No.: OAM 5-63 (A)

Project Title: Clearinghouse on Automation and Technological Change

Contractor: International Labor Organization

Principal Staff: George Thompson, Head, Central Documentation Service, ILO

Objectives and Procedures:

This project is supporting the planning and organization of a clearinghouse for information on automation and technological change as part of the ILO's program for a world-wide exchange of data on the social and economic implications of technological progress.

Both substantive studies and technical research on documentation procedures for controlling the literature of automation are involved in the various sub-projects supported under this contract.

Status of Project:

Preliminary reports have been received for the following completed sub-projects:

- (i) Report on classification system for a clearinghouse on automation;
- (iii) Bibliography on developments in leading industrialized countries; and
- (iv) Bibliography and report on automation developments in USSR.

Sub-project (ii), "Abstracts of Some 200 Items on Automation," is still in process. A preliminary report consisting of a set of abstracts has been submitted to OAMAT for consideration.

Of the reports received, only that submitted for sub-project (iv), "A Review of Recent Soviet Literature on the Social Aspects of Automation and Technological Change in the USSR," is expected to be published during 1964.

Contract No.: OAM 5-63 (B)

Project Title: Health and Safety Aspects of Automation and Technological Change

Contractor: International Labor Organization

Principal Staff: Marcel Robert, Chief, International Occupational Safety and Health Information Center

Objectives and Procedures:

The objective of this project has been to prepare a collection of abstracts of selected studies from leading countries on the health and safety aspects of automation.

Information pertinent to this subject has been assembled and abstracted from the files of the International Safety and Health Information Center.

Status of Project:

The first set of abstracts from this project was published by OAMT in early 1964 as Health and Safety Aspects of Automation and Technological Change: A Collection of Abstracts, 1956 to 1962. A supplement of abstracts up-dating the literature to the present will be published by OAMT in late 1964.

Contract No.: OAM 5-63 (D)

Project Title: Training of Maintenance Workers

Contractor: International Labor Organization
Geneva, Switzerland

Principal Staff: Sven Grabe

Objectives and Procedures:

The principal objective is to determine possible sources of skilled workers in the mechanical/electrical fields to service and maintain machinery in automated and mechanized plants which do not already have such workers. The project will also furnish material for determining action required to assure appropriate training of these maintenance workers.

Field investigations are being conducted in six to eight European countries and interviews and observations being made in at least 12 selected plants in the chemical and bakery industries.

Status of Project:

Completion is expected late in 1964.

Contract No.: OAM 7-63

Project Title: Manpower Requirements for Technical Information Support Personnel

Contractor: Auerbach Corporation, Philadelphia, Pennsylvania

Principal Staff: Richard Ridall, Murray Dodge, Myles Mandell

Objectives and Procedures:

Using the case study method, this pilot study investigated the number and types of jobs associated with the preparation and distribution of technical documentation in the communications equipment industry (SIC 366). The primary jobs considered were those directly related to supplying support to the scientists and engineers. The possible future effects of automation on these technical information support personnel were also studied. Estimates were made of the numbers of technical information support personnel required now and by 1970 in the communications equipment industry.

Status of Project:

A final report, A Study of Manpower Requirements for Technical Information Support Personnel, was submitted January 1964. Copies of this report will be placed in selected libraries. A monograph based on the report is being prepared for publication.

Highlights of Findings:

The report identifies six major types of technical information support which accounted for approximately 4.7 percent of the industry's estimated total employment of 445,000 in 1962--technical writing, drafting, reproduction, library (information center), standards, and spare parts provisioning. Until 1970 technical information support is expected to increase at a rate of not quite 50 percent--the same growth rate projected for total employment in the industry. However, by 1970 the drafting category, which is by far the largest in number of jobs, will account for a smaller percentage of the total of all six categories. The study indicated a relationship between the growth in the number of engineers and the number of technical information personnel in the communications equipment industry.

Contract No.: MDTA 15-64

Project Title: Pilot Study of Obsolescence of Scientific and Engineering Skills

Contractor: Columbia University, Seminar on Technology and Social Change, New York, New York

Principal Staff: Dr. Aaron W. Warner

Objectives and Procedures:

The principal objectives of this project are:

(1) To identify the process of scientific and engineering skill obsolescence in typical occupations and industries, to identify the areas which need investigation, and to develop pilot techniques for assessing the size and nature of the problem;

(2) To outline the staffing and operational problems which skill obsolescence poses for research and engineering management in private industry, government agencies, and elsewhere;

(3) To appraise and evaluate the programs instituted by certain industrial firms for equipping obsolescent scientific and engineering personnel with new skills;

(4) To develop concepts, information, and related techniques of investigation, which will be useful for public and private agencies which work on problems arising from obsolescence of scientific and engineering skills.

Information on the problem of technical skill obsolescence will be sought from about 40 organizations. Such information will be gathered through depth interviews with engineering managers and other directly-involved executives in the organizations studied, and with scientists and engineers employed in these organizations. The interview data will be analyzed and the published statistics on the age, education, experience, and other characteristics of practicing scientists and engineers will be reviewed in the light of this analysis.

Status of Project:

Completion of the project is scheduled for Spring of 1966.

Contract No.: MDTA 17-64

Project Title: A Study to Develop a Segment of an Early Warning System

Contractor: Arthur D. Little, Inc.
Cambridge, Massachusetts

Principal Staff: Dr. Arthur A. Brown, Waldo Newcomer

Objectives and Procedures:

This study is a pilot project intended to establish a system for analysis of the impact of both major and minor technological changes upon employment.

There are types of activities, or "unit operations," such as mixing or cutting, which are substantially the same in many industries. In the present study, pertinent unit operations in two industries will be studied, and two unit operations will be studied in all industries in which they occur. These studies are expected to help determine the kinds of information that will be needed to implement an early warning system for automation and technological change phenomena. Predictions of the manpower implications of automation in the specific areas under investigation will also be made as part of these studies.

Status of Project:

The first monthly progress report was submitted in June 1964. The final report is scheduled for December 1964.

Contract No.: MDTA 21-64

Project Title: Management Decisions to Automate in Firms at Various Levels of Technology

Contractor: Bureau of Business and Economic Research
Northeastern University, Boston, Massachusetts

Principal Staff: Dr. Dean S. Ammer, Research Professor and Director
Bureau of Business and Economic Research

Dr. Morris A. Horowitz, Associate Director
Bureau of Business and Economic Research and
Chairman, Department of Economics

Dr. Ernest DeCicco, Assistant Professor of
Economics and Senior Research Associate
Bureau of Business and Economic Research

Objectives and Procedures:

The project will study intensively six representative gray iron foundries: two that are highly automated, two with moderate automation, and two that are virtually unautomated. This industry is particularly well suited for a comparative case study approach, since one can find firms within it at almost every conceivable level of technology. The objectives of the study are to:

- (1) Compare original decisions to automate with results actually achieved;
- (2) Determine what intangible benefits (or losses) companies experienced as a result of automation decisions;
- (3) Evaluate effect of particular decisions on job mix, occupational structure and wage rates, and
- (4) Estimate whether automation brings diminishing (or increasing) returns.

Status of Project:

Work on project began in June 1964.

Contract No.: MDTA 36-64

Project Title: A Pilot Study of Short-Term Impacts of Automation and Technological Changes on Employment in the Power Laundry Industry

Contractor: Denver Research Institute
Denver, Colorado

Principal Staff: James F. Mahar, Senior Research Scientist
Dean C. Coddington, Research Economist

Objectives and Procedures:

This study will attempt to predict the rate of adoption of automation and mechanization and the resulting impacts on industry employment and the mix of labor skills for nine plants in the power laundry industry (SIC 7211). The project will involve a study in depth of the major factors which lead to significant employment changes in the industry.

The objectives are:

- (1) To identify significant existing innovations which have been adopted by some plants and not by others;
- (2) To identify innovations about to be introduced and whose adoption by the laundry industry appears certain;
- (3) To predict the rates of impact on levels and types of employment; and
- (4) To establish quantitative relationships between changes in the levels of automation and their employment impacts.

Status of Project:

Completion is scheduled for June 1965. During the first 6 months the contractors plan to gather data and complete studies of the selected firms. The last 6 months will be devoted to analysis and report preparation.

Contract No.: MDTA 38-64

Project Title: The Impact of Technological Change on the Skill and Occupational Composition of Employment Opportunities

Contractor: Harvard University, Cambridge, Massachusetts

Principal Staff: Dr. John Dunlop

Objectives and Procedures:

The objective of this study is to develop methods for estimating the effects of technological change upon the skill requirements and the distribution of occupations in selected industries.

To accomplish this, a comparative analysis will be made of occupational data for a number of new plants with the older plants which they replaced in the same industry.

Information to be secured from each plant or facility includes data on number of employees in each occupation, occupational wage schedules, areas of seniority, and patterns of internal movement on promotions and layoff. Occupational comparisons between the old plants and the new ones will concentrate on measures of the differences in skill, responsibility, and other occupational characteristics.

Changes in the relative importance of various job classifications in the new and old plants will be studied. Data will be secured for approximately 20 new plants and for the older plants which they replaced. Special emphasis will be placed on the disappearance of old occupations and the emergence of new ones.

Status of Project:

A final report is due late in 1965.

APPENDIX I

GUIDELINES FOR SUBMISSION OF CONTRACT RESEARCH PROPOSALS UNDER MDTA

CONTRACTUAL RESEARCH PROGRAM

Purpose

The Office of Manpower, Automation and Training (OMAT) conducts research in the broad areas of manpower resources, requirements, development, and utilization for the purpose of developing information and methods needed to deal with the problems of unemployment. It utilizes its own staff resources, those of the Department of Labor and other Federal agencies, and research resources outside the Federal Government.

Authority

Title I of the Manpower Development and Training Act of 1962 (see appendix III) authorizes the Secretary of Labor to "arrange for the conduct of such research and investigations as give promise of furthering the objectives of this Act."

Under the above authority, the Department of Labor enters into *contracts* for the conduct of research by organizations outside the Department. It does *not* make *grants* in support of research.

PROPOSAL SUBMISSIONS

Qualified research specialists and organizations may submit proposals for research projects which give promise of furthering the objectives of the Manpower Development and Training Act. It is suggested that initial submissions of research proposals be in the form of preliminary submissions of research ideas. Such submissions should contain the following information in brief, nontechnical language:

1. Problem to be investigated.
2. Objectives of study.
3. Procedures.
4. Time and budget requirements (summary only).

Research organizations submitting research ideas to OMAT for the first time may also wish to submit background information on their staff, facilities, and capabilities for research.

Based on a review of preliminary submissions, OMAT may request formal contract research proposals in specific areas suggested. Such proposals would be expected to follow the guidelines contained in the instructions which follow.

INSTRUCTIONS FOR

PREPARING AND SUBMITTING A PROPOSAL FOR A RESEARCH PROJECT UNDER THE MANPOWER DEVELOPMENT AND TRAINING ACT, PL 87-415

These instructions are in three parts:

- A. General instructions,
- B. A specific outline to be used in describing the content and procedure of the research project, including personnel and facilities, and
- C. An outline for an estimated budget.

There is *no printed* form to be used.

A. GENERAL INSTRUCTIONS

1. Proposal Submission

The first page of the proposal must show the following information in the order indicated.

**PROPOSAL SUBMITTED TO THE DIRECTOR, OFFICE OF MANPOWER, AUTOMATION AND TRAINING,
U.S. DEPARTMENT OF LABOR, FOR THE CONDUCT OF A RESEARCH PROJECT UNDER
THE PROVISIONS OF TITLE I OF THE MANPOWER DEVELOPMENT AND TRAINING ACT, PL 87-415**

- Project title:** (Be concise, descriptive, and as specific as possible. Avoid obscure technical terms. Include key words under which project may be indexed.)
- Submitted by:** (Name of organization, institution, agency, or individual hereinafter referred to as "organization.")
- Address:** (Of organization.)
- Telephone number:** (Of organization. Include area code.)
- Initiated by:** (Full name and position of individual who is initiating project, ordinarily the director or chief investigator.)
- Transmitted by:** (Full name and position of official who is approving the submission of the proposal. This must be someone with authority to commit the organization to the proposed project. The proposal should be signed by both the initiator and the transmitter on the original or master copy.)
- Date:** (Date transmitted.)

2. Mailing Address for Proposals

Send all proposals to: Director
Office of Manpower, Automation and Training
U.S. Department of Labor
Washington, D.C. 20009

3. Scope and Substance of the Proposal

The initial proposal should be complete enough to communicate all the information necessary for a sound evaluation. Excessive length should be avoided. It should encompass the following:

a. *Area of Study*

(1) The proposed research should seek to develop new knowledge or new applications of existing knowledge which give promise of furthering the objectives of the Manpower Act. The objectives of the Manpower Act as stated in title I of the act may be summarized as follows:

(a) To develop and apply the information and methods needed to deal with the problems of unemployment and other malutilizations of manpower resources.

(b) To accomplish technological progress while avoiding or minimizing individual hardship and widespread unemployment.

(c) To raise the skill levels of the Nation's work force, to increase the Nation's productivity, and to provide the manpower resources needed for the advancing technology.

(2) The project should be focused primarily on significant manpower problems.

(3) The anticipated results of the project should have broad national interest. Projects may be limited to special areas *only* where such studies can be shown to provide a basis for generalized conclusions, or to have application over a wide area.

(4) The project should not duplicate ongoing research; nor should it duplicate completed research the results of which provide currently valid applications.

b. *Research Design*

(1) The problem with which the research proposes to deal should be clearly defined.

(2) The proposal should reflect an adequate knowledge of other research related to the problem.

(3) Questions to be answered or hypotheses to be tested should be well formulated and clearly stated.

(4) The proposal should outline fully the procedures to be followed and wherever applicable, include information on such matters as sampling procedures, controls, types of data to be gathered, and statistical analyses to be made.

c. *Personnel and Facilities*

(1) The director or principal investigator must be someone who has previously done successful research in the area involved or who has clearly demonstrated competence for performing or directing work in that area.

(2) The organization or individual submitting the proposal must have facilities and staff available which are adequate for carrying out the research.

(3) Where applicable, as, for example, for a research proposal involving a casework study of a training program, the proposal should indicate the agreed interest and intended cooperation in the program on the part of all local agencies whose interest and cooperation are necessary for the successful accomplishment of the research project.

d. *Economic Efficiency*

(1) The suggested approach to the problem must be reasonable in terms of overall cost as compared with the cost of other possible approaches.

(2) The suggested approach to problems involving the analysis of statistical data must utilize, to the extent feasible, data already available or being collected through government and other sources.

(3) The total proposed expenditure must be justifiable in terms of the probable value of the results of the proposed research.

4. Preparation of Proposal Statements and Reports

Generally, initial proposals should run about 8 to 10 pages in length. More detailed and lengthier statements may be required for proposals during negotiation.

a. *Number of Copies Required*

Proposals should be submitted in 30 copies, typed or otherwise reproduced on white paper of standard size on one side only.

b. Submission and Review Dates

Proposals may be submitted at any time, and will be reviewed as expeditiously as possible. Acknowledgment of receipt will usually be made within 15 days. Processing, review by research specialists, and evaluations of comments received usually require 60 days from receipt of proposal.

5. Approval

Notice of approval for negotiation (or disapproval) will be given as soon as possible following review and evaluation. Final approval for contracting will depend on negotiations, and will require agreement on content, structure and budget of the project by both the organization and the Office of Manpower, Automation and Training. **NOTE:** As required by the Office of Statistical Standards, Bureau of the Budget, any research contract entered into will include the following clause: "The Researcher shall submit to the Secretary or his designated representative copies of all proposed questionnaires and survey plans for clearance in advance of the use in accordance with the Federal Reports Act of 1942."

B. OUTLINE OF PROPOSAL CONTENT AND PROCEDURE

Follow the outline below in describing the proposed project. Identify each section by number and title as indicated in the outline.

1. Abstract

On a *single, separate* page submit a summary of the proposal under two main heads: (1) Objectives and (2) Procedures.

2. Problem

Give a brief statement of the problem to be investigated explaining its importance and significance in relationship to the objectives of the Manpower Act.

3. Objectives

State the hypotheses to be tested or the specific questions to be answered.

4. Relationship to Other Research

Discuss the proposed study in relation to previous or ongoing research in related areas, and indicate how the proposed study will extend the body of knowledge about the areas. Point out what will be distinctive or different about the proposed research as compared with previous research, and in what ways it may suggest or lend support to programs for action in the manpower area.

5. Procedure

Describe the procedure in detail listing the steps to be followed. Where pertinent, be sure to include specific information on each of the following:

a. Populations, samples, experimental and control groups, if any.

Indicate their origin, composition, purpose, use, numbers involved, types of data to be collected on each, sampling plans, etc.

b. Experimental design and methods to be used.

c. Data.

Describe types to be gathered and methods to be used. Indicate extent to which data analyzed will be from existing sources, such as Department of Labor or Census Bureau. Describe questionnaires, interview guides, tests, and other research instruments to be used.

d. Analyses.

Indicate methods of statistical and other analyses to be used in testing the hypotheses or achieving the objectives.

e. Phasing.

Indicate approximate time schedule for various aspects or phases of the project.

f. Expected end product.

This should include preliminary reports of findings periodically during the course of the project, and a final report.

6. Personnel

Give name, title, and a brief statement of the research experience of the principal investigator, and of other key personnel if possible.

7. Facilities

Indicate special facilities and similar advantages, including research staff resources, available to the organization.

8. Duration

Estimate total time for project and indicate beginning and ending dates.

9. Other Information

Indicate other information pertinent to the proposal, including the following:

a. Extent of agreed cooperation in project by agencies whose support is necessary for the successful accomplishment of objectives. Include names and titles of officials of such agencies giving assurance of cooperation. For example, in a training-research project, cooperation of State employment security agency may be vital to the success of the project.

b. Amount of financial or other support available for this project from other sources.

c. Whether this proposal has been or will be submitted to any other agency or organization for financial support.

d. Whether this proposal is an extension of or an addition to a previous project supported by the Department of Labor or other government agency.

e. Whether this project or a similar one was previously submitted to the Department of Labor or other government agency.

C. BUDGET

Include a section on estimated costs of the project to be covered by contract with the Department of Labor. Start this section on a new page, identifying it in sequence with previous sections as "10. Budget."

The cost of performance of a contract includes the costs of necessary direct items of expenditure incurred in the performance of the contract; it may also include an amount for overhead or indirect costs to be determined by negotiation.

Following the categories as shown in the outline below, and rounding all amounts to the nearest dollar, list anticipated requirements for all items of expenditure. If the project is expected to extend beyond the end of the fiscal year (June 30), indicate amounts required for each year and in total.

1. Direct Costs

a. *Personal Services*

(1) Include salaries and wages of all personnel which are directly attributable to actual performance under this contract, whether on a full- or part-time basis. (List personnel by title, man-months and dollar amount.)

(2) Include, in connection with the above, but identify separately, allowances for vacation, holiday, and sick-leave pay. Also include employee benefits if customarily granted.

(3) Include consultants as required.

b. *Materials and Supplies*

List all materials and supplies which are directly expended by the contractor in performance of the contract.

c. *Travel*

Include subsistence during travel, in accordance with the contractor's established policy.

d. *Communications*

Include telephone and telegraph charges.

e. *Services*

Include those not specifically covered under personal services. When a study involves securing information through Federal agencies (as U.S. Bureau of the Census) or State agencies (as State employment service), the costs of such services should be included.

f. *Other*

Itemize by category and amount.

2. Indirect Costs or Overhead

Include pro-rata share of administrative costs. Give basis for the determination of the proposed overhead rate and reference to other current Government contracts, if any. Overhead rates may be fixed during the negotiation of a contract, or may be determined provisionally, with final settlement made at the conclusion of the contract.

If the division between direct and indirect costs as outlined above differs from the contractor's established accounting system and procedures for allocating such costs, the contractor's system may be followed and the differences will be considered in negotiating an equitable percentage to be applied in the contract. It is most important that all items of cost be readily identifiable regardless of whether they are shown as direct or indirect.

The proposed budget will be reviewed against applicable Federal regulations as part of the initial review. Where changes are necessary for projects which are otherwise approved for negotiation, these changes, as well as decisions concerning the determination of overhead rate, will be made during the negotiation of the contract.

APPENDIX II

AVAILABILITY OF RESEARCH REPORTS

The following libraries and OMAT field offices contain copies of research reports submitted to the U. S. Department of Labor under the contract research program of the Office of Manpower, Automation and Training. The libraries are subscribers to the Library of Congress' Documents Expediting Project.

ALABAMA

University of Alabama Library
University, Alabama

California State Library
Sacramento, California

San Diego State College Library
San Diego, California

ALASKA

University of Alaska Library
College, Alaska

COLORADO

University of Colorado Libraries
Boulder, Colorado

ARIZONA

Matthews Library
Arizona State University
Tempe, Arizona

DISTRICT OF COLUMBIA

Library of Congress
Washington, D. C.

University of Arizona Library
Tucson, Arizona

DELAWARE

University of Delaware Library
Newark, Delaware

CALIFORNIA

University of California
General Library
Berkeley, California

FLORIDA

Florida State University Library
Tallahassee, Florida

The Honnold Library
Claremont, California

University of Florida Libraries
Gainesville, Florida

University of California
Library
Los Angeles, California

GEORGIA

University of Georgia Libraries
Athens, Georgia

University of Southern Calif.
Library
Los Angeles, California

HAWAII

University of Hawaii Library
Honolulu, Hawaii

ILLINOIS

Midwest Inter-Library Center
5721 Cottage Grove Avenue
Chicago, Illinois

University of Chicago Library
Chicago, Illinois

Northwestern University
Library
Evanston, Illinois

University of Illinois
Library
Urbana, Illinois

Southern Illinois University
Library
Carbondale, Illinois

INDIANA

Indiana University Library
Bloomington, Indiana

Indiana State Library
140 North Senate Avenue
Indianapolis, Indiana

Purdue University Library
Lafayette, Indiana

Ball State Teachers College
Muncie, Indiana

Indiana State Teachers College
Terre Haute, Indiana

KANSAS

University of Kansas Library
Lawrence, Kansas

Kansas State University
Library
Manhattan, Kansas

MAINE

Raymond H. Fogler Library
University of Maine
Orono, Maine

MARYLAND

University of Maryland Library
College Park, Maryland

Enoch Pratt Free Library
Baltimore, Maryland

Johns Hopkins University
Library
Baltimore, Maryland

MASSACHUSETTS

Lesley College Library
Cambridge, Massachusetts

MICHIGAN

University of Michigan Library
Ann Arbor, Michigan

Detroit Public Library
5201 Woodward Avenue
Detroit, Michigan

Wayne State University Library
Detroit, Michigan

Michigan State University
East Lansing, Michigan

Eastern Michigan University
Ypsilanti, Michigan

MINNESOTA

University of Minnesota Library
Minneapolis, Minnesota

MISSISSIPPI

Mississippi State University
Library
State College, Mississippi

Library, Mississippi Southern
College
P. O. Box 53, Station A
Hattiesburg, Mississippi

MISSOURI

University of Missouri Library
Columbia, Missouri

Kansas City Public Library
Ninth and Locust Streets
Kansas City, Missouri

NEBRASKA

University of Nebraska Library
Lincoln, Nebraska

NEW HAMPSHIRE

Dartmouth College Library
Hanover, New Hampshire

NEW JERSEY

Rutgers University Library
New Brunswick, New Jersey

Princeton University Library
Princeton, New Jersey

NEW YORK

New York State Library
Albany, New York

Brooklyn Public Library
Grand Army Plaza
Brooklyn, New York

Cornell University Library
Ithaca, New York

Columbia University Libraries
535 West 114th Street
New York, New York

New York Public Library
Fifth Avenue and 42nd Street
New York, New York

United Nations Library
New York, New York

Syracuse University Library
Syracuse, New York

Brooklyn College Library
Brooklyn, New York

NORTH CAROLINA

Duke University Library
Durham, North Carolina

University of North Carolina
Chapel Hill, North Carolina

North Carolina State College
D. H. Hill Library
Raleigh, North Carolina

OHIO

Ohio State University Libraries
1858 Neil Avenue
Columbus, Ohio

Kent State University Library
Kent, Ohio

Miami University Library
Oxford, Ohio

OKLAHOMA

Oklahoma State Library
109 State Capitol
Oklahoma City, Oklahoma

Oklahoma State University Library
Stillwater, Oklahoma

Central State College Library
Edmond, Oklahoma

PENNSYLVANIA

Lehigh University Library
Bethlehem, Pennsylvania

The Pennsylvania State Library
Box 1601, Harrisburg, Pennsylvania

Free Library of Philadelphia
Philadelphia, Pennsylvania

American Institute for
Research
410 Amberson Avenue
Pittsburgh, Pennsylvania

Pennsylvania State University
Library
University Park, Pennsylvania

Carnegie Library of Pittsburgh
Pittsburgh, Pennsylvania

RHODE ISLAND

Brown University Library
Documents Division
Providence, Rhode Island

TENNESSEE

University of Tennessee
Library
Documents Librarian
Knoxville, Tennessee

Joint University Libraries
Nashville, Tennessee

TEXAS

Dallas Public Library
Documents Librarian
Dallas, Texas

UTAH

Brigham Young University
Documents Section
Provo, Utah

Library Periodical Room
University of Utah
Salt Lake City, Utah

VIRGINIA

University of Virginia
Library
Public Documents
Charlottesville, Virginia

WASHINGTON

University of Washington
Library
Seattle, Washington

Washington State University
Library
Pullman, Washington

WISCONSIN

Milwaukee Public Library
814 West Wisconsin Avenue
Milwaukee, Wisconsin

University of Wisconsin-
Milwaukee Library
Milwaukee, Wisconsin

WYOMING

University of Wyoming
Library
Laramie, Wyoming

OMAT FIELD OFFICES

- I. Boston 18 Oliver Street, Room 505
Boston, Massachusetts 02110
- II. New York 341 Ninth Avenue, Room 708
New York, New York 10001
- III. Pittsburgh Park Building, Room 1019
355 Fifth Avenue
Pittsburgh, Pennsylvania 15222
- IV. District of Columbia . . . Vanguard Building, Room 517
1111 20th Street NW.
Washington, D.C. 20036
- V. Atlanta 1371 Peachtree Street, Room 323
Atlanta, Georgia 30309
- VI. Cleveland Engineers Building, Room 607
1365 Ontario Street
Cleveland, Ohio 44114
- VII. Detroit Washington Boulevard Building, Room 809
234 State Street
Detroit, Michigan 48226
- VIII. Chicago 219 South Dearborn Street
Chicago, Illinois 60604
- IX. Kansas City Federal Office Building, Room 2209
Kansas City, Missouri 64106
- X. Dallas Commerce Building, Room 1001
1416 Commerce Street
Dallas, Texas 75201
- XI. Denver 730 17th Street
Denver, Colorado 80202
- XII. Los Angeles Bartlett Building, Room 431
215 West Seventh Street
Los Angeles, California 90014
- XIII. San Francisco 450 Golden Gate Avenue, Room 10066
P. O. Box 36017
San Francisco, California 94102
- XIV. Seattle Smith Tower Building, Room 1921
Seattle, Washington 98104

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PUBLICATIONS AVAILABLE FROM OMAT OFFICE OF RESEARCH
(Published in Fiscal Year 1964)

- RESEARCH BULLETINS:** Manpower Research Bulletin No. 4 - Selected Manpower Indicators for States (November 1963)
Shows variations and relationships among the States on several basic manpower subjects.
- Manpower Research Bulletin No. 5 - Family Breadwinners: Their Special Training Needs (January 1964)
Provides an economic profile of the breadwinners and outlines their special training and other needs.
- MANPOWER REPORTS:** Manpower Report No. 8 - The Length of Working Life for Males, 1900-1960 (July 1963)
Reviews the changing length of working life for males during the past 60 years.
- Manpower Report No. 9 - Employment Trends and Manpower Requirements in Government (July 1963)
Compares and evaluates employment trends in local, State, and Federal government.
- Manpower Report No. 10 - Job Changing and Manpower Training (June 1964)
Combines mobility studies with a study of the length of working life of men to show additional dimensions of job changing and job stability.
- PRESIDENT'S REPORT:** Manpower Report of the President and Report on Manpower Requirements, Resources, Utilization, and Training (March 1964)
Provides statistical data and related information in respect to the Nation's manpower and training needs present and future, and the steps necessary to meet them.
- SECRETARY'S REPORT:** Manpower Research and Training Under the Manpower Development and Training Act--A Report by the Secretary of Labor (March 1964)
A report covering progress made during calendar year 1963, the first full calendar year of program operations under the act. Provides a continuation to the review and evaluation of programs reported earlier for the last 5 months of 1962.