

R E P O R T R E S U M E S

ED 014 686

AC 901 726

MANPOWER RESEARCH PROJECTS SPONSORED BY THE U.S. DEPARTMENT OF LABOR, MANPOWER ADMINISTRATION, THROUGH JUNE 30, 1967. MANPOWER ADMINISTRATION (DOL), WASHINGTON, D.C.

PUB DATE SEP 67

EDRS PRICE MF-\$1.00 HC-\$8.28 205P.

DESCRIPTORS- \*MANPOWER DEVELOPMENT, \*MANPOWER UTILIZATION, \*EMPLOYMENT PATTERNS, \*UNEMPLOYMENT, \*RESEARCH PROJECTS, FEDERAL LEGISLATION, CONTRACTS, GRANTS, GEOGRAPHIC REGIONS, FINANCIAL POLICY, MINORITY GROUPS, MIGRANT WORKERS, EMPLOYMENT OPPORTUNITIES, VOCATIONAL EDUCATION, LABOR MARKET, TECHNOLOGICAL ADVANCEMENT, VOCATIONAL COUNSELING, PROGRAM EVALUATION, JOB TRAINING, RESEARCH PROPOSALS, DOCTORAL DEGREES, PRIVATE AGENCIES, UNIVERSITIES, RURAL AREAS, FEMALES, U.S. DEPT. OF LABOR, MANPOWER ADMINISTRATION,

THE FIFTH ANNUAL CATALOG OF CONTRACT AND GRANT RESEARCH UNDER THE MANPOWER ADMINISTRATION OF THE DEPARTMENT OF LABOR DESCRIBES PROJECTS CONCERNED WITH THE IMPACT OF TECHNOLOGICAL CHANGE, ADEQUACY OF JOB PREPARATION, UNEMPLOYMENT OF THE YOUNG, THE NON-WHITE, AND OTHER SPECIAL GROUPS, AND THE WASTE OF HUMAN RESOURCES IN RURAL AREAS. THE INVESTIGATORS REPRESENT ALL THE MAJOR SOCIAL SCIENCE DISCIPLINES. MOST OF THEM ARE AFFILIATED WITH UNIVERSITIES, OR OTHER GOVERNMENT AGENCIES, ALTHOUGH A FEW WORK FOR PRIVATE RESEARCH AGENCIES. THE MOST AMBITIOUS PROJECTS ARE CONDUCTED UNDER CONTRACTS. SMALLER PROJECTS ARE SPONSORED UNDER THREE PROGRAMS OF RESEARCH GRANTS DESIGNED TO STRENGTHEN MANPOWER EFFORTS IN COLLEGES AND UNIVERSITIES AND TO STIMULATE THE STUDY OF MANPOWER PROBLEMS BY INDIVIDUALS. RESEARCH ACTIVE IN FISCAL YEAR 1967 IS GROUPED BY--(1) CONTRACTS FOR OFFICE OF MANPOWER POLICY, EVALUATION, AND RESEARCH, (2) INSTITUTIONAL GRANTS, (3) GRANTS FOR DOCTORAL DISSERTATIONS AND (4) FOR RESEARCH PROJECTS, AND (5) CONTRACTS FOR BUREAU OF WORK PROGRAMS. THERE IS A SELECTED LIST OF 114 COMPLETED PROJECTS. APPENDIXES INCLUDE DEPOSITORY LOCATIONS FOR REPORTS AND GUIDELINES FOR SUBMISSION OF CONTRACT RESEARCH PROPOSALS AND FOR APPLICATION FOR GRANTS IN SUPPORT OF DOCTORAL DISSERTATIONS AND RESEARCH PROJECTS. (LY)

ED014686

# MANPOWER RESEARCH PROJECTS

SPONSORED BY THE  
U.S. DEPARTMENT OF LABOR,  
MANPOWER ADMINISTRATION

Through  
June 30, 1967

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

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE  
PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS  
STATED DO NOT NECESSARILY REPRESENT OFFICIAL OFFICE OF EDUCATION  
POSITION OR POLICY

U.S. DEPARTMENT OF LABOR  
Manpower Administration

**MANPOWER  
RESEARCH  
PROJECTS**

**SPONSORED BY THE  
U.S. DEPARTMENT OF LABOR,  
MANPOWER ADMINISTRATION**

**Through  
June 30, 1967**

**September 1967**

**U.S. DEPARTMENT OF LABOR  
Willard Wirtz, Secretary  
MANPOWER ADMINISTRATION  
Stanley H. Ruttenberg, Manpower Administrator**

## CONTENTS

	Page
List of Office of Manpower Policy, Evaluation, and Research Contractors .....	v
List of Office of Manpower Policy, Evaluation, and Research Grantees .....	vii
List of Bureau of Work Program Contractors .....	ix
List of Projects, by Number .....	xi
<b>INTRODUCTION</b> .....	1
<b>PART 1. Contracts for Office of Manpower Policy, Evaluation, and Research Active in Fiscal Year 1967</b> .....	5
<b>PART 2. Institutional Grants Active in Fiscal Year 1967</b> .....	45
<b>PART 3. Grants for Doctoral Dissertations Active in Fiscal Year 1967</b> .....	51
<b>PART 4. Grants for Research Projects Active in Fiscal Year 1967</b> .....	71
<b>PART 5. Contracts for Bureau of Work Programs Active in Fiscal Year 1967</b>	91
<b>PART 6. Selected List of Completed Projects</b> .....	103
<b>APPENDIX A. Depository Locations for Reports</b> .....	117
<b>APPENDIX B. Guidelines for Submission of Contract Research Proposals Under the Manpower Development and Training Act of 1962, as Amended</b> .....	127

	Page
<b>APPENDIX C.</b> Guidelines for Submission of Contract Research and Evaluation Proposals Under the Economic Opportunity Act, Title I, Parts B and D and Title II, Sections 205(d) and (e), as Amended .....	137
<b>APPENDIX D.</b> Guidelines for Applications for Grants in Support of Doctoral Dissertations .....	151
<b>APPENDIX E.</b> Guidelines for Applications for Grants in Support of Research Projects .....	163
<b>APPENDIX F.</b> Membership of the Subcommittee on Research of the National Manpower Advisory Committee .....	177
<b>APPENDIX G.</b> Manpower Development and Training Act of 1962, Title I, as Amended .....	181
<b>INDEX</b> .....	187

## LIST OF OFFICE OF MANPOWER POLICY, EVALUATION, AND RESEARCH CONTRACTORS

	Page
Arnstein, Dr. George .....	7
Association for the Help of Retarded Children .....	7
Bureau of Social Science Research, Inc. ....	7, 8
California, University of, at Berkeley .....	8, 9
California, University of, at Los Angeles .....	9
Cambridge Center for Social Studies .....	9
Census, Bureau of the .....	10
Chaneles, Dr. Sol .....	11
Columbia University .....	11, 13
Defense, Department of .....	14
Employment Security, Bureau of .....	14, 15
Greenleigh Associates, Inc. ....	15
Harvard University .....	16, 17, 18
Illinois Institute of Technology .....	18
Illinois, University of .....	18
International Labour Organisation .....	19
Labor Statistics, Bureau of .....	19, 20
Lafayette Clinic, The .....	21
Maryland, University of .....	22
Michigan State University .....	23, 24
Michigan, The University of .....	22
Michigan, University of—Wayne State University .....	23
Minnesota, University of .....	24
Missouri, University of .....	25
National Education Association .....	25
National Educational Television and Radio Center .....	26
National Industrial Conference Board, Inc. ....	26
National Manpower Policy Task Force .....	27
National Opinion Research Center .....	27
National Planning Association .....	28

	Page
National Science Foundation .....	29
New York University .....	29
North Carolina State University, at Raleigh .....	30
North Carolina, University of .....	30
Northeastern University .....	31
North Star Research and Development Institute .....	30
Ohio State University Research Foundation, The .....	31
Oklahoma State University of Agriculture and Applied Science Research Foundation .....	32
Pennsylvania State University .....	32, 33
Philadelphia, The City of .....	33
Philco Corporation .....	34
Pierson, Dr. Frank C. ....	34
Princeton University .....	34
Purdue Research Foundation .....	35
Research Triangle Institute .....	35
San Jose State College .....	36
Stanford University .....	36
Staten Island Mental Health Society, Inc. ....	37
Survey Research Center .....	37
System Development Corporation .....	37
Temple University .....	38
Texas, University of .....	38, 39
Upjohn Institute for Employment Research, The W.E. ....	39, 40
Wayne State University .....	40
Wisconsin, University of .....	41
Women's Bureau .....	42

# LIST OF OFFICE OF MANPOWER POLICY, EVALUATION, AND RESEARCH GRANTEES

	Page
American University, The .....	73
Arizona, University of .....	73
Arkansas, University of .....	53
Atlanta University .....	47
Bowling Green State University .....	73
Brandeis University .....	53
Bureau of Social Science Research, Inc. ....	74
California, University of, at Berkeley .....	53, 54, 74
California, University of, at Los Angeles .....	54
Central Washington State College .....	75
Chicago, University of .....	54
Columbia University .....	54, 55, 75
Cornell University .....	56, 75, 76
Fordham University .....	56
George Washington University, The .....	76
Georgia, University of .....	77
Harvard University .....	56, 57, 77
Illinois, University of .....	57, 77
Indiana University Foundation .....	78
Iowa State University .....	47
Iowa, University of .....	58
Maine, University of .....	48
Maryland, University of .....	58, 78
Massachusetts Institute of Technology .....	58, 79
Massachusetts, University of .....	78
Michigan State University .....	60, 61, 80, 81
Michigan, The University of .....	59, 79
Michigan, University of—Wayne State University .....	80
Minnesota, University of .....	81
Missouri, University of .....	82



	Page
National Opinion Research Center .....	82
New School For Social Research .....	61
New York University .....	62, 82
New York, State University of .....	83
North Carolina State University at Raleigh .....	48
Northeastern University .....	83
Oakland Small Business Development Center, Inc. ....	84
Ohio State University Research Foundation .....	62
Oklahoma State University .....	49, 63
Oklahoma State University of Agriculture and Applied Science Research Foundation .....	63
Oregon, University of .....	84
Pennsylvania, University of .....	64, 85
Princeton University .....	64
Purdue Research Foundation .....	85
Purdue University .....	64, 85
Rochester, University of .....	86
Sam Houston College .....	86
Southern Illinois University .....	86
South Florida, University of .....	86
Stanford University .....	65, 87
Syracuse University .....	65
Temple University .....	49, 87
Texas Technological College .....	66
Vanderbilt University .....	87
Vermont, University of .....	88
Virginia State College at Norfolk .....	49
Washington, University of .....	66
Washington University .....	66
Wayne State University .....	67
West Virginia University .....	88
Wisconsin, University of .....	67, 68, 69
Yale University .....	69, 70
Yosemite Junior College District .....	88

## LIST OF BUREAU OF WORK PROGRAM CONTRACTORS

	Page
Arizona State University .....	93
Bureau of Social Science Research, Inc. ....	93
California, University of, at Los Angeles .....	93
Dunlap and Associates, Inc. ....	94
Economic Systems Corporation .....	94
Educational Testing Service .....	95
Fordham University .....	96
George Washington University, The .....	96
Minnesota, University of .....	96
National Analysts, Inc. ....	97
National Opinion Research Center .....	97
North Star Research and Development Institute .....	98
Planning Research Corporation .....	98, 99
Research Triangle Institute .....	99
Rice University .....	99
Staten Island Mental Health Society, Inc. ....	100
Systems Development Corporation .....	100
U.S. Research and Development Corporation .....	101
Western Reserve University .....	101

## LIST OF PROJECTS ACTIVE IN FISCAL YEAR 1967, BY NUMBER

### CONTRACTS

<i>Project No.</i>	<i>Contractor</i>	<i>Title</i>	<i>Page</i>
✓ OAM 5-63 (D)	International Labour Organisation Geneva, Switzerland	Training of Maintenance Workers	19
OAM 5-63 (G)	International Labour Organisation Geneva, Switzerland	International Comparison of Procedures for Dealing with Redundancy in Selected Countries in Europe	19
⓪ ✓ MDTA 9-63	Michigan State University East Lansing, Mich.	Measuring the Benefits and Costs of Retraining Programs for Unemployed Workers	24
⓪ ✓ MDTA 14-63	University of Wisconsin Madison, Wis.	Training Implications of Job Shifts from Blue-Collar to White-Collar Employment	41
⓪ ✓ MDTA 16-63 (81-08-26)	Bureau of Social Science Research, Inc. Washington, D.C.	Supplementary Study of Employment of Retired Military Personnel	8
MDTA 17-63	The University of Michigan Ann Arbor, Mich.	Attitude Survey of Manpower Develop- ment and Training Act Trainees	22
✓ MDTA 5-64	University of Illinois Champaign, Ill.	Training and Recruitment Problems for Selected Technical Occupations in Short Supply	18
MDTA 7-64	University of Michigan— Wayne State University Detroit, Mich.	The Negro and Equal Opportunities: A Review of Management Experiences in 20 Companies	23

<i>Project No.</i>	<i>Contractor</i>	<i>Title</i>	<i>Page</i>
MDTA 14-64	Manpower Utilization Commission Philadelphia, Pa.	A Study of the Need for Work Adjustment and Social Work Assistance for the Long-Term Unemployed	33
MDTA 15-64	Columbia University New York, N.Y.	Obsolescence and Updating of Engineers' and Scientists' Skills	13
MDTA 18-64	Staten Island Mental Health Society, Inc. Staten Island, N.Y.	Restoration of Youth Through Training	37
MDTA 22-64	National Opinion Research Center Chicago, Ill.	Graduates of Predominantly Negro Colleges—Class of 1964	27
MDTA 23-64	Bureau of Labor Statistics U.S. Department of Labor Washington, D.C.	Estimates of Employment Requirements by Occupation for 1970	20
MDTA 26-64	University of North Carolina Chapel Hill, N.C.	A Manpower Study of Clinical Laboratory Personnel, Including Medical Technicians	30
MDTA 27-64	Bureau of the Census U.S. Department of Commerce Washington, D.C.	Tabulations on the Relationship Between Patterns of Child Bearing and Labor Force Participation of Women	10
MDTA 29-64	Harvard University Cambridge, Mass.	The Job Content of the U.S. Economy, 1940-1970	17
MDTA 34-64	National Education Association Washington, D.C.	Adapting Educational Change to Manpower Needs in Quincy, Mass., and Wood County (Parkersburg), W.Va.	25
MDTA 38-64	Harvard University Cambridge, Mass.	Internal Labor Markets, Technological Change, and Labor Force Adjustment	16
81-22-01	University of Minnesota Minneapolis, Minn.	Work Attitudes of Unemployed Youth	24
81-37-03	Temple University Philadelphia, Pa.	Dialect Remediation Training in Philadelphia, Pa.	38
81-08-08	Women's Bureau U.S. Department of Labor Washington, D.C.	National Survey of Child-Care Arrangements of Working Mothers	42
81-08-20	National Planning Association Washington, D.C.	Manpower Needs for National Objectives in the 1970's	28

<b>Project No.</b>	<b>Contractor</b>	<b>Title</b>	<b>Page</b>
81-31-21	Association for the Help of Retarded Children New York, N.Y.	The Employment of New York City's Mentally Retarded Adults	7
✓ 81-08-22	Women's Bureau U.S. Department of Labor Washington, D.C.	Women Workers: Their Special Training Needs	42
81-08-23	Women's Bureau U.S. Department of Labor Washington, D.C.	Employment Opportunities for Women in Subprofessional Occupations	42
81-24-25	University of Missouri Columbia, Mo.	A Followup Study of MDTA Trainees in the Cities of St. Louis, Kansas City, and Joplin, Mo.	25
81-08-26	(See MDTA 16-63)		
81-04-27	San Jose State College San Jose, Calif.	A Study of the Unemployment and Re-employment Experiences of Scientists and Engineers Laid Off by 62 Aerospace and Electronics Firms in the San Francisco Bay Area During 1963-65	36
81-34-28	Ohio State University Columbus, Ohio (See also 81-08-38)	Longitudinal Study of Labor Force Behavior	31
81-22-30	University of Minnesota Minneapolis, Minn.	Job Performance of Young Workers in Relation to School Background	24
81-32-31	Research Triangle Institute Durham, N.C.	Employment Problems of Young Men Who Do Not Meet Mental Requirements of the Selective Service System	35
81-13-33	Purdue Research Foundation Lafayette, Ind.	A Study of the Need for Educational and Training Adjustments in the Apprenticeship Programs for Selected Craft Occupations	35
81-20-34	Northeastern University Boston, Mass.	Evaluation of the Training of Tool and Die Makers	31
81-22-35	North Star Research and Development Institute Minneapolis, Minn.	Effects of Vocational Training and Other Factors on Employment Experience	30
81-04-36	University of California Los Angeles, Calif.	Automated and Nonautomated Jobs in the Los Angeles Aircraft Industry	9

<b>Project No.</b>	<b>Contractor</b>	<b>Title</b>	<b>Page</b>
81-19-37	University of Maryland College Park, Md.	Employment Problems of Released Prisoners	22
81-08-38	Bureau of the Census U.S. Department of Commerce Washington, D.C. (See also 81-34-28)	Longitudinal Study of Labor Force Behavior	31
81-46-66-01	University of Texas Austin, Tex.	Negro Participation in Apprenticeship Programs	38
81-34-66-02 (81-34-66-29) (81-34-67-25)	Columbia University New York, N.Y.	Employment Expansion in a Dynamic Economy	11
81-23-66-03	Cambridge Center for Social Studies Cambridge, Mass.	An Investigation of Supplementary Unemployment Benefit Plans	9
81-24-66-04	Wayne State University Detroit, Mich.	The Role of Social Reinforcement Parameters in Facilitating Trainee Mo- tivation, Learning, and Job Perform- ance	40
81-09-66-07	Bureau of Labor Statistics U.S. Department of Labor Washington, D.C.	Extent of Volunteer Work, November 1965	20
81-09-66-08	Bureau of Labor Statistics U.S. Department of Labor Washington, D.C.	Job Redesign for Older Workers: 10 Case Studies	20
81-09-66-10	Bureau of the Census U.S. Department of Commerce Washington, D.C.	Pretest Survey on Occupations and Edu- cational Backgrounds of State and Local Government Employees	10
81-05-66-11	Stanford University Stanford, Calif.	Decision Process and Determinants in Occupational Choice	36
81-09-66-12	Bureau of Employment Security U.S. Department of Labor Washington, D.C.	Manpower and the Public Employment Service in Europe	14
81-34-66-13	National Industrial Conference Board, Inc. New York, N.Y.	Role of Job Vacancies—Case Study of Rochester, N.Y., in 1965	26
81-24-66-14	The Lafayette Clinic Detroit, Mich.	Validation of a Physiological Test of Aptitude for Learning Social Motives	21
81-09-66-15	Bureau of Labor Statistics U.S. Department of Labor Washington, D.C.	Study of Wage and Hour Standards as Applied to Bona Fide Trainees in Other Countries	19

<b>Project No.</b>	<b>Contractor</b>	<b>Title</b>	<b>Page</b>
81-09-66-16	National Science Foundation Washington, D.C.	Symposium on Manpower Theory	29
81-15-66-17	Illinois Institute of Technology Chicago, Ill.	Management and Automation	18
81-38-66-20	Oklahoma State University Stillwater, Okla.	The Determinants of Labor Force Participation Rates in the Ozark Low-Income Area	32
81-23-66-22	Harvard University Cambridge, Mass.	Internal Adjustments in the Manufacturing Sector to Tightening Labor Markets and Skill Shortages	17
81-40-66-24	Dr. Frank C. Pierson Swarthmore College Swarthmore, Pa.	Preparation of a Paper on Professional and Supporting Personnel for the 1967 <i>Manpower Report of the President</i>	34
81-34-66-25	New York University New York, N.Y.	A Study of the Relationship of Industry Hiring Practices to the Employment of Disadvantaged Groups	29
✓ 81-09-66-27	Bureau of Social Science Research, Inc. Washington, D.C.	Occupational Adjustment of Recent Low-Income Southern In-migrants to Cleveland	7
81-34-66-28	National Educational Television and Radio Center New York, N.Y.	Choice: Challenge for Modern Women	26
81-34-66-29	(See 81-34-66-02)		
81-05-66-30	University of California Berkeley, Calif.	An Evaluation of the Skill Demands of Manufacturing and Service Processes at Various Levels of Technology	8
81-09-66-31	National Manpower Policy Task Force Washington, D.C.	Identifying Needs and Priorities in Manpower Research	27
81-24-66-32	Michigan State University East Lansing, Mich.	The Mexican American Migrant Farmworker in Transition	23
✓ 81-34-66-33	Greenleigh Associates, Inc. New York, N.Y.	A Study of Those Not Working in a Tight Labor Market—Milwaukee, Wis.	15
81-24-67-02	The University of Michigan Ann Arbor, Mich.	Study of the Impact of Changes in Machine Technology on a Cross Section of the Labor Force	37
✓ 81-53-67-03	University of Wisconsin Madison, Wis.	A Conference on Research in Apprenticeship Training	41

<b>Project No.</b>	<b>Contractor</b>	<b>Title</b>	<b>Page</b>
81-53-67-04	Bureau of Employment Security U.S. Department of Labor Washington, D.C.	Development of a Model System of Occupational and Employment Information Under the Vocational Education Act of 1963	15
81-40-67-05 (81-40-67-09)	Pennsylvania State University University Park, Pa.	A Study to Determine the Influence of Supplemental Labor Market Information on the Jobseeking Behavior of Selected Groups of Unemployed Workers	33
81-05-67-06	Philco Corporation Western Development Laboratories Palo Alto, Calif.	Exploratory Study of Job Performance Aids and Their Potential Impact Upon Training Requirements and Manpower Utilization	34
81-34-67-07	Dr. Sol Chaneles New York, N.Y.	Preparation of a Paper on the Central City Ghetto for the 1967 Manpower Report of the President	11
81-09-67-08	National Planning Association Washington, D.C.	Research on Manpower Implications of National Goals and Public Programs	28
81-40-67-09	(See 81-40-67-05)		
31-09-67-10	Bureau of Labor Statistics U.S. Department of Labor Washington, D.C.	Survey of Employment and Unemployment in Slum Areas in 10 Cities	20
√81-53-67-12	University of Wisconsin Madison, Wis.	Conference on the Education and Training of Racial Minorities	41
81-09-67-13	W. E. Upjohn Institute for Employment Research Washington, D.C.	Analysis of Minority Group Employment Data	40
81-09-67-16	Dr. George Arnstein Washington, D.C.	Preparation of Monographs Based on a Research Study, "Pilot Program to Assist School Districts to Meet the Needs of Technological Change"	7
81-09-67-17	Bureau of the Census U.S. Department of Commerce Washington, D.C.	Occupational Classification Study	10
81-05-67-18	Systems Development Corporation Santa Monica, Calif.	Research Program on the Application of Systems Analysis to Manpower Adjustment	37
81-32-67-19	Princeton University Princeton, N.J.	Systems Analysis and the Labor Market	34



<i>Project No.</i>	<i>Contractor</i>	<i>Title</i>	<i>Page</i>
81-09-67-20	U.S. Department of Defense Washington, D.C.	Economic Impact of Defense Programs	14
81-40-67-21	Pennsylvania State University University Park, Pa.	University Research Consultation Conference	32
81-09-67-22	W. E. Upjohn Institute for Employment Research Washington, D.C.	The Feasibility of a Direct Method of Obtaining Manpower Demand Data	39
81-23-67-23	Harvard University Cambridge, Mass.	A Study of the Conceptual Bases and Uses of Various Manpower and Occu- pational Systems	18
81-05-67-24	University of California Berkeley, Calif.	A Study of Employer Policies in a Large Metropolitan Labor Market Area	9
81-34-67-25	(See 81-34-66-02)		
81-09-67-26	University of Texas Austin, Tex.	Research Conference on the Changing Occupational Patterns of Negroes	39
81-35-67-27	North Carolina State University Raleigh, N.C. and North Carolina Agricultural and Technical College Greensboro, N.C.	Generic Bases of Negro Teenage Un- employment: A Preliminary Investiga- tion	30

#### GRANTS

<i>Project No.</i>	<i>Grantee</i>	<i>Title</i>	<i>Page</i>
91-15-66-01	National Opinion Research Center Chicago, Ill.	College, Color, Employment: Racial Differences in Postgraduate Employ- ment Among 1964 Graduates of Louisi- ana Colleges	82
91-27-66-02	University of Missouri Columbia, Mo.	Job Opportunities and Job Discrimina- tion as Perceived by Adults of Low Socioeconomic Status	82
91-24-66-03	University of Michigan— Wayne State University Ann Arbor, Mich.	Community Organization and the Mo- bilization of Resources for Manpower Development Programs	80
91-48-66-05	The University of Vermont Burlington, Vt.	Economic Forecasting Model of the State of Vermont	88

<b>Project No.</b>	<b>Grantee</b>	<b>Title</b>	<b>Page</b>
91-07-66-06	Yale University New Haven, Conn.	The Effect of Education on Income	70
91-22-66-08	University of Maryland College Park, Md.	Manpower Utilization and Requirements in Library and Information Services	78
91-05-66-09	University of California Los Angeles, Calif.	Labor Force Composition and the Minimum Wage	54
91-53-66-10	University of Wisconsin Madison, Wis.	An Evaluation of Area Skill Surveys as a Basis for Manpower Policies	68
91-53-66-11	University of Wisconsin Madison, Wis.	The Structure of Related Instruction in Wisconsin Apprenticeship Programs	67
91-38-66-12	Oklahoma State University Stillwater, Okla.	An Analysis of Job Satisfaction of Employed Youth Involved in an Experimental School Dropout Rehabilitation Program in Oklahoma City	63
91-37-66-13	Ohio State University Columbus, Ohio	Development and Utilization of Managerial Talent: A Labor Market Study of Managers in Manufacturing Establishments	62
91-24-66-14	Wayne State University Detroit, Mich.	Teaching Practices for Preventing Dropouts	67
91-23-66-15	Harvard University Cambridge, Mass.	An Economic Analysis of Scientific and Engineering Manpower	56
91-23-66-16	Harvard University Cambridge, Mass.	Dynamics of Labor Turnover in U.S. Industry	57
91-34-66-18	New York University New York, N.Y.	A Study of Variables Involved in the Successful Adaptation of Agricultural Migrant Families	62
91-07-66-19	Yale University New Haven, Conn.	A Benefit Cost Study of New Haven's Work-Training Programs	69
91-32-66-20	Princeton University Princeton, N.J.	Hiring Practices, Hiring Standards, and Manpower Development Policies of Selected Employing Institutions in Labor Markets With Differing Rates of Unemployment	64
91-15-66-21	University of Chicago Chicago, Ill.	An Economic Analysis of Adoption of Mechanical Cotton Harvesters	54

<b>Project No.</b>	<b>Grantee</b>	<b>Title</b>	<b>Page</b>
91-24-66-22	The University of Michigan Ann Arbor, Mich.	Family Composition and the Labor Force Participation of Married Women	59
91-09-66-23	The George Washington University Washington, D.C.	Methods for Accuracy Analysis and Sensitivity Analysis for Projections of Area Labor Force, Employment, and Unemployment	76
91-05-66-24	Stanford University Stanford, Calif.	Manpower Effects of Cuban Immigrant Flows, 1959-66	65
91-09-66-25	The American University Washington, D.C.	Use of Programed Case Technique for Increasing Job Opportunities	73
✓ 91-53-66-26	University of Wisconsin Madison, Wis.	The Cost and Benefits of Unemploy- ment, Retraining, and Relocation in an Economically Depressed Area: A Case Study of Five Counties in West Vir- ginia	69
91-53-66-27	University of Wisconsin Madison, Wis.	Personal and Behavioral Factors Affect- ing the Supply of the Self-Employed	69
91-16-66-28	Purdue Research Foundation Lafayette, Ind.	Engineers and Scientists: A Compara- tive Analysis of Professional Values and Behavior	85
91-15-66-29	University of Illinois Champaign, Ill.	Forecasting Manpower Requirements on the Basis of Historical Data	77
91-24-66-30	Michigan State University East Lansing, Mich.	Research to Demonstrate the Uses of Unemployment Insurance Wage Reports	80
✓ 91-34-66-31	Columbia University New York, N.Y.	Training of Nonprofessional Manpower in New York City Hospitals	54
91-16-66-32	Indiana University Foundation Bloomington, Ind.	A Study of Labor Force Adaptation to Technical Change in the Coal Industry	78
91-09-66-33	Bureau of Social Science Research, Inc. Washington, D.C.	Enrollment, Termination, and Program Outcomes of Neighborhood Youth Corps Youth as Related to Their Eco- nomic Needs—A Planning Study	74
✓ 91-15-66-34	Southern Illinois University Carbondale, Ill.	A Study of the Relationship Between Resignation and Job Retraining	86
✓ 91-05-66-35	Yosemite Junior College Modesto, Calif.	The Validation of a Specified Testing Program for MDTA Trainees	88

<i>Project No.</i>	<i>Grantee</i>	<i>Title</i>	<i>Page</i>
91-23-66-36	Massachusetts Institute of Technology Cambridge, Mass.	The Determinants of the Relative Unemployment of Skilled and Unskilled Workers	58
91-34-66-37	Columbia University New York, N.Y.	Some Unanticipated Effects of Advanced Education on a Critical Manpower Resource, the Inservice Teacher	55
91-39-66-38	University of Oregon Eugene, Ore.	An Input-Output Model for Use in Manpower Projections for a State	84
91-03-66-39	University of Arizona Tucson, Ariz.	The Impact of Defense Contract Termination on the Labor Force	73
✓ 91-37-66-40	Ohio State University Columbus, Ohio	An Analysis of Government Training Programs in Ohio	62
91-34-66-41	Cornell University Ithaca, N.Y.	Case Studies of Viable Worker-Management Relationships on Farms in New York State	75
91-24-66-42	Michigan State University East Lansing, Mich.	A Study of Interpersonal Relationships Among Managers and Employees of Fruit and Vegetable Farms With Emphasis on Labor-Management Practices Utilized	81
91-24-66-43	Michigan State University East Lansing, Mich.	The Impact of Work Organization on Commitment to and Participation in a Scientific Discipline	61
91-24-66-44	Michigan State University East Lansing, Mich.	Economic Mobility in an Affluent Community	60
91-24-66-45	Michigan State University East Lansing, Mich.	The Effect of Economic Position on Perception of Economic Opportunities	60
91-11-66-46	University of Georgia Athens, Ga.	A Feasibility Study to Identify the Underemployed and to Examine the Labor Market Attachment of Labor Force Nonparticipants in a Low-Income Area	77
91-34-66-47	Cornell University Ithaca, N.Y.	An Examination of the Transferability of Military Occupational Skills to the Civilian Labor Force	56
91-34-66-48	University of Rochester Rochester, N.Y.	The Relationship of Migrant Workers' Attitudes and Behavior to Their Work Environment	86

<i>Project No.</i>	<i>Grantee</i>	<i>Title</i>	<i>Page</i>
91-34-66-49	Cornell University Ithaca, N.Y.	Migrant Labor as a Form of Intermittent Social Organization and as a Channel for Geographic Mobility	76
91-38-66-50	Oklahoma State University Stillwater, Okla.	A Comparative Analysis of the Impact of Various Types of Curricula on the Vocational Success of School Dropouts	63
91-51-66-51	Central Washington State College Ellensburg, Wash.	Ethnic Differences and Historical Change in Manpower Resources of a Small Town	75
91-15-66-52	University of Illinois Urbana, Ill.	Sociological Determinants of College Aspiration, College Curriculum Choice, and Occupational Aspiration Among Working Class Adolescents	57
91-05-66-53	Stanford University Stanford, Calif.	International Differences in Unemployment Rates of New Entrants to the Labor Force	87
91-51-66-54	University of Washington Seattle, Wash.	Impact of Governmental Programs on Employment of Youth in the Seattle Labor Market	66
91-23-66-55	University of Massachusetts Amherst, Mass.	Spatial Mobility and Manpower Development	78
91-52-66-56	West Virginia University Morgantown, W.Va.	Social-Psychological Factors Associated With Responses to Retraining	88
91-34-66-57	New York University New York, N.Y.	Unskilled Workers in the Labor Force: Problems and Proposals	82
91-34-66-58	Columbia University New York, N.Y.	Manpower Resources of the U.S. Off-shore Maritime Industry	55
91-23-66-59	Brandeis University Waltham, Mass.	The Career Patterns of Women Physicians	53
91-11-66-60	Atlanta University Atlanta, Ga.	Manpower Research Institutional Grant	47
91-17-66-61	Iowa State University Ames, Iowa	Manpower Research Institutional Grant	47
91-40-66-62	Temple University Philadelphia, Pa.	Manpower Research Institutional Grant	49

<b>Project No.</b>	<b>Grantee</b>	<b>Title</b>	<b>Page</b>
91-21-66-63	University of Maine Orono, Maine	Manpower Research Institutional Grant	48
91-38-66-64	Oklahoma State University Stillwater, Okla.	Manpower Research Institutional Grant	49
91-35-66-65	North Carolina State University Raleigh, N.C.	Manpower Research Institutional Grant	48
91-49-66-66	Virginia State College Norfolk, Va.	Manpower Research Institutional Grant	49
91-10-66-67	University of South Florida Tampa, Fla.	A Determination of the Special Labor Force Problems Created by Significant Participation of Retirees	86
91-53-66-68	University of Wisconsin Madison, Wis.	Using Monetary Incentives to Motivate and Stabilize the Employment of Wel- fare Recipients	68
91-53-66-69	University of Wisconsin Madison, Wis.	Individual Need Satisfaction in Work and Nonwork	68
91-04-66-70	University of Arkansas Fayetteville, Ark.	Industrial Recruiting Experience in Small City Job Markets	53
91-37-66-71	Bowling Green State University Bowling Green, Ohio	The Meaning of Work and Its Relation to the Development of the Motivation to Work	73
91-46-66-72	Sam Houston College Huntsville, Tex.	Job Obsolescence in the Law Enforce- ment and Correctional Field	86
91-24-67-01	Michigan State University East Lansing, Mich.	Factors Involved in Upward Social Mo- bility From the Culture of Poverty	61
91-40-67-02	University of Pennsylvania Philadelphia, Pa.	Development of a Classification System of Data From Occupational Training Survey on the Training Background of the Labor Force	85
91-24-67-03	Michigan State University East Lansing, Mich.	The Impact of Automated Technology on Occupational Specialization	61
91-22-67-04	University of Maryland College Park, Md.	The Applicability of the Job-Bank Con- cept to the Washington, D.C., Market for Female Household Workers	58
91-24-67-05	University of Michigan— Wayne State University Ann Arbor, Mich.	A Survey of Literature on the Working Poor	80

<b>Project No.</b>	<b>Grantee</b>	<b>Title</b>	<b>Page</b>
91-34-67-06	New York University New York, N.Y.	An Exploratory Study of Domestic's View of Their Working World	82
91-34-67-07	State University of New York Buffalo, N.Y.	Development of Stochastic Labor Force and Working Life Models	83
91-23-67-08	Harvard University Cambridge, Mass.	Factors Determining Patterns of Em- ployment and Unemployment in the Construction Industry	57
91-17-67-09	The University of Iowa Iowa City, Iowa	The Effectiveness of Wage Rates in Attracting and Repelling People to Offer Labor Service	58
91-25-67-10	University of Minnesota Minneapolis, Minn.	Manpower Planning and Forecasting in the Firm: An Exploratory Probe	81
91-23-67-11	Massachusetts Institute of Technology Cambridge, Mass.	Computer Based Matching Systems: An Exploration of the State of the Art and the Proposed Nationwide Matching Sys- tem	79
91-25-67-12	University of Minnesota Minneapolis, Minn.	Problems of Counseling Special Popu- lations Pursuant to Government Man- power Programs	81
91-16-67-13	Purdue University Lafayette, Ind.	A 30-Year Longitudinal Study of En- gineering Interest Profiles and Career Patte.....	64
✓91-38-67-14	Oklahoma State University Stillwater, Okla.	An Evaluation of Institutional Voca- tional Training Received by American Indians Through the Muskogee, Okla., Area Office of the Bureau of Indian Affair	63
91-27-67-15	Washington University St. Louis, Mo.	A Study of the Motivating and Dissatis- fying Forces in Isolated Work Situa- tions	66
✓91-53-67-17	University of Wisconsin Madison, Wis.	A Study of Women in the MDTA Voca- tional Training program in the State of Wisconsin	67
91-45-67-19	Vanderbilt University Nashville, Tenn.	The Economics of Labor Force Partici- pation	87
91-53-67-20	University of Wisconsin Madison, Wis.	Joint Labor-Management Committees on Technological Change in the Mid- west: A Comparative Study of Their Labor Market and Organizational Cor- relates	68

<b>Project No.</b>	<b>Grantee</b>	<b>Title</b>	<b>Page</b>
91-24-67-21	The University of Michigan Ann Arbor, Mich.	The Career Patterns of Female Social Workers	59
91-36-67-23	Fordham University Bronx, N.Y.	The Role of Social and Cultural Links in the Urban Occupational Adjustment of Southern Appalachian Migrants	56
91-24-67-24	The University of Michigan Ann Arbor, Mich.	A Survey of Literature on Negroes' Access to Entry-Level Jobs	79
91-05-67-29	Oakland Small Business Development Center, Inc. Oakland, Calif.	A Study of the Manpower Implications of Small Business Financing	84
91-07-67-38	Yale University New Haven, Conn.	Demand and Supply Under Conditions of Shortage: A Study of the Nursing Profession	70
91-23-67-42	Harvard University Cambridge, Mass.	The Effects of Unemployment and In- flation on Income Distribution in the United States	56
91-16-67-43	Purdue University Lafayette, Ind.	The Female Engineer Scientist: Factors Associated With the Pursuit of a Pro- fessional Career	85
91-34-67-44	Columbia University New York, N.Y.	Labor Force Participation and Business Fluctuations: An Analysis by Cyclical Stages	55
91-34-67-46	The New School for Social Research New York, N.Y.	The Effects of Prior Work Experience on the Professional Socialization of So- cial Work Students	61
91-46-67-47	Texas Technological College Lubbock, Tex.	Motivational Aspects of the Chronically Unemployed	66
91-34-67-48	Cornell University Ithaca, N.Y.	Migrant Labor as a Form of Intermit- tent Social Organization	76
91-23-67-49	Northeastern University Boston, Mass.	A Pilot Study of Career Decisionmaking	83
91-40-67-51	University of Pennsylvania Philadelphia, Pa.	Interrelationship Between Educational Level and Occupational Structure of the Labor Force—An International Com- parison	64
91-34-67-54	Syracuse University Syracuse, N.Y.	A Study of the Effects of Examiner Race, Sex, and Warmth on Test Re- sponses of Negro Examinees	65



<i>Project No.</i>	<i>Grantee</i>	<i>Title</i>	<i>Page</i>
91-24-67-56	The University of Michigan Ann Arbor, Mich.	Study of the Correlates of Long-Term Unemployment	79
91-23-67-57	Northeastern University Boston, Mass.	Hiring Standards for Paramedical Man- power	83
91-34-67-58	Columbia University New York, N.Y.	Occupational Choice and its Determi- nants Among Totally Blind Individuals	75
91-05-67-60	University of California Berkeley, Calif.	Employment Agencies and School Placement Services in a Large Metro- politan Labor Market Area	74
91-05-67-61	University of California Berkeley, Calif.	A Study of Changing Skill Require- ments in the Building Trades	74
91-24-68-01	Michigan State University East Lansing, Mich.	The Aftermath of the Bracero: A Study of the Economic Impact on the Agricul- tural Hired Labor Market of Michigan from the Termination of Public Law 78	60
91-22-68-02	University of Maryland College Park, Md.	The Impact of Changes in Farm Char- acteristics on the Rate of Release of Labor Resources From Farm Production Activities in Selected Types of Farming Areas in Maryland	78
91-34-68-03	Syracuse University Syracuse, N.Y.	The Theory of Manpower Requirements and Occupational Retraining and the Determinants of MDTA Training Suc- cess	65
91-05-68-04	University of California Berkeley, Calif.	Racial Integration in the Railroad Op- erating Crafts	54
91-05-68-05	University of California Berkeley, Calif.	Self-Employment and Education as Avenues of Social Mobility for Chinese, Japanese, and Negroes in Urban Areas	53
91-23-68-06	Harvard University Cambridge, Mass.	A Program and Policy Analysis of the "Concentrated Employment Program" —Boston, Mass.	77
91-24-68-07	The University of Michigan Ann Arbor, Mich.	Community Organization, Race, and Entry into the Work Force	59
91-40-68-08	Temple University Philadelphia, Pa.	Labor Force Nonparticipation of Males in Urban Poor Areas	87

## BUREAU OF WORK PROGRAM CONTRACTS

<i>Project No.</i>	<i>Contractor</i>	<i>Title</i>	<i>Page</i>
41-7-001-40 (81-40-66-18)	National Analysts, Inc. Philadelphia, Pa.	A Study of the Year-Round and Summer Neighborhood Youth Corps Program for In-School Students	97
41-7-002-37	Western Reserve University Cleveland, Ohio	A Study of Impact and Effectiveness of the Comprehensive Manpower Project of Cleveland (AIM-JOBS)	101
41-7-003-46	Rice University Houston, Tex.	Organizational Problems in Enrolling Hard-Core Youths and in Creating Attitude Changes in the Houston Neighborhood Youth Corps Projects	99
41-7-004-9 (81-09-66-19)	The George Washington University Washington, D.C.	A Study of the Effectiveness of Selected Out-of-School Neighborhood Youth Corps Programs	96
41-7-005-3	Arizona State University Tempe, Ariz.	The Development of Group Counseling Models for Potential Uses in the Neighborhood Youth Corps Program	93
41-7-006-25	North Star Research and Development Institute Minneapolis, Minn.	Optimizing the Benefits of Neighborhood Youth Corps Projects for Rural Youth	98
41-7-007-9	Bureau of Social Science Research, Inc. Washington, D.C.	Economic Needs of Neighborhood Youth Corps Enrollees	93
41-7-008-25 (66-00-08)	University of Minnesota Minneapolis, Minn.	A Pilot Study on Observational Measurement of Behavioral Factors Associated With Increased Employability of Out-of-School Neighborhood Youth Corps Enrollees	96
41-7-009-34	Staten Island Mental Health Society, Inc. Staten Island, N.Y.	Transition Between "Work Experience" and Work	100
41-7-010-34	Fordham University Bronx, N.Y.	The Job Supervisor's Role in Neighborhood Youth Corps Programs for Out-of-School Youth	96
66-00-09	Educational Testing Service Princeton, N.J.	Development of Evaluational Instruments for Use With the Neighborhood Youth Corps Program	95

<b>Project No.</b>	<b>Contractor</b>	<b>Title</b>	<b>Page</b>
66-00-10	National Opinion Research Center University of Chicago Chicago, Ill.	A Study of the Effectiveness of a National Sample of NYC In-School Projects	97
67-02-01	Dunlap and Associates, Inc. Darien, Conn.	Survey of Terminees From Out-of-School Neighborhood Youth Corps Projects	94
67-02-02	University of California Los Angeles, Calif.	An Observational Analysis Study of Los Angeles Neighborhood Youth Corps Projects	93
51-7-001-09	Planning Research Corporation Washington, D.C.	A Study to Develop and Test an Evaluation System for Operation Mainstream	99
51-7-002-34	United States Research and Development Corporation New York, N.Y.	Pilot Evaluation of the Operation Mainstream Program	101
61-7-001-09	Planning Research Corporation Washington, D.C.	A Study to Develop and Test an Evaluation System for Scheuer Amendment Projects	98
61-7-002-09	Economic Systems Corporation Washington, D.C.	Pilot Evaluation of the New Careers Program	94
71-7-001-49	Systems Development Corporation Falls Church, Va.	An Evaluation of the Special Impact Program in Six Selected Areas	100
81-35-67-01	Research Triangle Institute Durham, N.C.	A Comprehensive Assessment of the Problems and Characteristics of the Neighborhood Youth Corps Enrollees: A Pilot Investigation	99

## INTRODUCTION

With the twin goals of helping to sustain economic growth and enhancing the well-being of individuals, manpower policy during the 1960's has sought a better balance between the supply of workers and the demand for labor, as well as improvement in the utilization of our manpower. Programs to achieve these aims cannot be insulated from broad economic policies, nor can they be produced on order. They depend on a better understanding of man and his interaction with a highly technological society.

Hence, it is significant that the Manpower Development and Training Act (MDTA), when it was passed in 1962, outlined not only a program of training but a program of research. Title I of the act<sup>1</sup> directed the Secretary of Labor to establish a comprehensive manpower research program to "evaluate the impact of . . . changes in the structure of production and demand on the use of this Nation's human resources," and to develop the additional information and insight needed to support continuing improvements in manpower policies and programs.

In line with these congressional directives, the Manpower Administration of the Department of Labor, under its Associate Manpower Administrator for Policy, Evaluation, and Research, has developed and administered a program of contract and grant research.<sup>2</sup> This catalog—the fifth annual volume—describes the current program. In its 5 years of operation, the Manpower Administration's research arm has used the social sciences in attempts to discover better ways of solving manpower problems and to fill gaps in the knowledge that is indispensable for informed social action.

Keeping the research program aligned with these objectives necessitates a continuous review of research priorities. The number and complexity of manpower problems change—current problems shift in importance and new ones emerge. The manpower research efforts of private organizations and other government agencies respond to similar influences, and the Department of Labor must use these groups as complements if its research funds are to be spent to best advantage. Furthermore, allowance must be made for the leadtime required to produce research results and then introduce those results into operating programs and policies.

In planning each year's research goals, the Manpower Administration's Research Office has developed research "orientations" and "targets." Where feasible, the three "program categories" of the Department's manpower development assistance program are used as targets: (1) Improving services, programs, and institutions concerned

<sup>1</sup> See app. G.

<sup>2</sup> Research for the Bureau of Work Programs is conducted under authority of the Economic Opportunity Act of 1964, title I, pts. B and D, and title II, secs. 205(d) and (e).

with manpower; (2) improving the productive potential of the population; and (3) assessing major economic and social influences on the work force and population.

Comparison of the new studies described in this volume with those of earlier years reveals the sensitivity of the Manpower Administration's research program to the emergence of new manpower problems. For example, because shortages of workers in certain occupations and areas were hampering some of the new social programs, a study was sponsored, to be completed this year, of the long-range manpower implications of national goals and public programs.

The comparison also reveals efforts to build on knowledge acquired in previous research projects for the solution of persistent manpower problems. Thus, all of the research catalogs describe projects concerned with one or another aspect of the impact of technological change on the labor force; the adequacy of workers' preparation for jobs; unemployment or underutilization of the young, the nonwhite, and other special groups; and the waste of human resources in rural areas.

The studies reported in this volume, like those in earlier editions, reflect attempts to place at the disposal of the administrators of manpower programs the most effective and advanced knowledge coming out of the social sciences. The investigators who are conducting the research represent all of the major social science disciplines—sociology, economics, industrial relations, psychology, political science, and anthropology—as well as the fields of business administration, engineering, and education. Most of the researchers are affiliated with universities or with other government agencies, although a few work for private research organizations.

The most ambitious research projects are conducted under contracts. Research under the Office of Manpower Policy, Evaluation, and Research (OMPER) was in progress under 64 contracts at the end of fiscal year 1967, of which 21 were initiated during that year. These studies are summarized in part 1 of this report. Arrangements were also made with OMPER this year to conduct the research and evaluation studies needed by the Department's new Bureau of Work Programs (BWP), thus coordinating OMPER's research more closely with the Department's numerous manpower programs. The BWP conducts various work-training programs throughout the country, and manpower research studies and evaluation projects are developed to produce findings which can be used to improve the overall effectiveness of those programs. (This activity is described in pt. 5.)

Smaller, but nonetheless significant, research projects are sponsored under three programs of research grants, authorized by a 1965 amendment to the MDTA. The purposes of these grant programs are to strengthen manpower efforts in colleges and universities and to stimulate the study of manpower problems by individual students and scholars. During fiscal year 1967, seven universities launched activities under manpower research institutional grants. These grants are designed to support the development of urgently needed manpower research talent and the pursuit of systematic, long-term programs of research on local and regional manpower problems. About 50 research projects have already been launched by the seven institutions. (See pt. 2. A separate report on the first year's operations under this institutional grant program is also available on request.) Twenty-three doctoral candidates received small grants during the year to support research for their dissertations. (See pt. 3.) Finally, 20 established scholars received small grants for innovative research and the development of research designs for major studies of manpower problems. (See pt. 4.) Efforts to secure the fullest use and application of research results were stepped up during the year, as the volume of completed studies increased. In translating advanced knowledge from the social sciences into efficient strategies for manpower programs, OMPER's Office of Manpower Research occupies a pivotal

position. To be most effective, it must serve as a bridge between the research community and the program administrator. In the manpower field, many of the judgments and assumptions about problems and methods of solving them rest on social science research. However, the program administrator cannot always defer action until the researcher finishes his task. Hence, if research is to provide the "hard" data which the administrator requires for improving his program, his problems need to be translated into researchable questions which are closely geared to their solution.

The research utilization efforts of the Office of Manpower Research entail systematic evaluation of the project reports to cull out all significant findings and analyze their implications for programs and policies. On the basis of this assessment, proposals are made for intervening in manpower programs. Although the Research Office alone cannot determine when and how to intervene, it attempts to provide a technical assistance service for introducing change in operating programs and for persuading program officials to accept research results as a possible trigger of change.

The more we delve into economic and social issues, the more we realize that there are no total answers or simple solutions. We are becoming more conscious of the need for research that develops information about various specific problems but, at the same time, fits into a design for the study of the total manpower scene. This research must be coordinated in such a way that it will provide the necessary understanding and information for efforts to solve the broad but complex manpower issues. With the help of conscientious, able, and innovational researchers, the Department of Labor hopes to continue to capitalize on its growing fund of knowledge.

## PART 1.

# CONTRACTS FOR OFFICE OF MANPOWER POLICY, EVALUATION, AND RESEARCH ACTIVE IN FISCAL YEAR 1967

This section describes contracts awarded to universities, individuals, and private research organizations by the Office of Manpower Policy, Evaluation, and Research of the Manpower Administration.

**Contract No.: 81-09-67-16**

**Contractor:** Dr. George Arnstein  
Washington, D.C.

**Principal Staff:** Dr. George Arnstein.

**Project Title:** Preparation of Monographs Based on a Research Study, "Pilot Program to Assist School Districts to Meet the Needs of Technological Change"

**Objectives and Procedures:** This project calls for the preparation of two monographs based on the findings of the research study, "Pilot Program to Assist School Districts to Meet the Needs of Technological Change," (contract MDTA 34-64). The articles are intended for publication in professional journals and will provide for the broad dissemination of research findings from the above study.

**Status of Project:** Completion is scheduled for fall 1967.

**Contract No.: 81-31-21**

**Contractor:** Association for the Help of Retarded Children  
New York City Chapter  
New York, New York

**Principal Staff:** Ida Alpert, Jack Tobias, Dr. Jacob Cohen.

**Project Title:** The Employment of New York City's Mentally Retarded Adults

**Objectives and Procedures:** The objective of this study is to determine the current employment status of mentally retarded adults in New York City and to develop information to enhance their future success in finding jobs. Specifically the study will involve investigation of: (1) The current employment status of young adults who had been classified as retarded during their school years; (2) the employment patterns of retarded workers in terms of stability of employment,

job categories, earnings, and methods of placement; and (3) the extent to which retarded persons utilize public and voluntary agencies in their efforts to find employment.

The study will survey 500 persons who have completed special education classes in the city. One-half of the group has been out of school for 2 years and the other half for 5 years. School records are to be examined, home interviews held with each subject, and psychological evaluations made of selected sub-groups.

**Status of Project:** Completion is scheduled for mid-1968.

**Preliminary Highlights of Findings:** The first phase of this project involved a census of all identified mentally retarded youth who left school in New York City in 1960 and 1963. Preliminary data from the school records of these individuals indicate the following: (1) It appears likely that a large percentage of retarded children are not so identified during their school years and many children with identified IQ's equivalent to those in special classes for the retarded are permitted to remain in regular classes; (2) the data suggest that teachers' identifications of retarded students are based on a combination of social factors in addition to intellectual deficit. It is likely that certain correlates of low socioeconomic status such as weakness in verbal comprehension are interpreted by teachers as symptomatic of retardation. This may account for the fact that Puerto Rican children were found to have about double their expected frequency in classes for the retarded.

**Contract No.: 81-09-66-27**

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

**Principal Staff:** Mrs. Laure M. Sharp.

**Project Title:** Occupational Adjustment of Recent Low-Income Southern In-migrants to Cleveland



**Objectives and Procedures:** This project will study the occupational adjustment in Cleveland of low-income southern in-migrants with less than 2 years of residence, and compare their experiences with those of long-term residents. The first phase of the study will include the collection of information obtained by personal interviews with 500 families, the analysis of this information, and the identification of the study subjects and the types of occupational adjustment services to be provided them during the second phase. The second phase will consist of an experimental counseling and training program, which will be conducted by the Project Peace Skill Center in Cleveland. The third and final phase will be a followup assessment of occupational adjustment.

**Status of Project:** The report on the first phase, the baseline study, is tentatively scheduled for mid-1968.

**Contract Nos.:** MDTA 16-63 and 81-08-26

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

**Principal Staff:** Mrs. Laure M. Sharp, Dr. Albert B. Biderman, Frank G. Davis.

**Project Title:** Supplementary Study of Employment of Retired Military Personnel

**Objectives and Procedures:** This project was comprised of two studies. The first (MDTA 16-63) investigated military retirees and their employment problems in undertaking second careers. The transition from military to civilian careers of all retirees during May 1964 was investigated and detailed information developed from a subsample of 300 jobseeking retirees, in order to identify their retraining needs and problems in utilizing their skills. As the first study progressed, it was determined to enlarge the subsample and lengthen the time period. The second study (81-08-26) did so by drawing upon additional information available from the Department of Defense.

**Status of Project:** Both projects have been completed.

**Highlights of Findings:** Prior to retirement virtually all respondents anticipated second careers, yet only 39 percent of the officers and 23 percent of the enlisted men reported jobs waiting for them. Six

months after retirement, 21 percent of the enlisted men and 17 percent of the officers were still actively seeking work. Those who were employed most often held relatively modest clerical or sales jobs. Nevertheless, longrun expectations were optimistic, even among those who still sought work.

The later study does not bear out the assumption that the high level of technical training received in the Armed Forces enhances civilian employment opportunities for military retirees. Nor are their employment difficulties primarily attributable to reluctance to relocate or to extravagant aspirations. Delays in jobseeking and possible need for retraining are the key causes for the difficulties faced by retirees. Respondents indicated a need for additional training to qualify for the first or a better job, but few had actually enrolled in training programs.

**Contract No.:** 81-05-66-30

**Contractor:** University of California at Berkeley  
Institute of Engineering Research and  
Institute of Industrial Relations  
Berkeley, California

**Principal Staff:** Dr. E. R. F. W. Crossman, Dr. Stephen Laner.

**Project Title:** An Evaluation of the Skill Demands of Manufacturing and Service Processes at Various Levels of Technology

**Objectives and Procedures:** This study supplements the data acquired in the contractors' study, "Evaluation of Changes in Skill-Profile and Job Content Due to Technological Change: Methodology and Pilot Results from the Banking, Steel, and Aerospace Industries."

The primary objective of both projects is to facilitate a better understanding of changes in the structure of the work force due to advancing technology. This is attempted through investigation of changes in the distribution of skill levels in the manufacturing and service work force as related to technological change.

Using a technique tested by the researchers in the pilot study, further industries will be studied with reference to direct (production) labor and supervision in maintenance, planning, scheduling, quality control, and junior management. Analysis of the relationship between human and machine functions, together with

a study of industrywide statistical data, will guide the selection of representative case material.

**Status of Project:** Completion of the project is scheduled for late 1967.

**Contract No.: 81-05-67-24**

**Contractor:** University of California at Berkeley  
Institute of Industrial Relations  
Berkeley, California

**Principal Staff:** Dr. Lloyd Ulman, Dr. Margaret S. Gordon, Dr. Harold L. Wilensky.

**Project Title:** A Study of Employer Policies in a Large Metropolitan Labor Market Area

**Objectives and Procedures:** The Institute of Industrial Relations is engaged in a 5-year program of research on the conditions of entry and related determinants of labor supply and demand in a number of geographically restricted job markets. As part of this program, the present study is concerned with updating the current body of knowledge on employer policies and practices, the bulk of which was accumulated in the late 1940's and early 1950's. The research team will analyze employer policies in light of the many significant changes that have occurred in job market institutions and conditions over the last 15 to 20 years. Particular attention will be devoted to: (1) Description (including, whenever possible, quantitative material) and analysis of employer recruitment, hiring, selection, training, compensation, promotion, and retirement policies; (2) interrelationships among such policies; (3) variables determining the choice or sequence of policies, including changes in job market conditions as well as the occupational, educational, demographic, or institutional distinctions of the various markets sampled; and (4) the impact of the policies themselves upon the employment opportunities of various groups of workers.

A sample survey, stratified by industry, was conducted among 300 firms with 100 or more employees in the San Francisco Bay area. Data were collected during extensive interviews with appropriate firm representatives and will be analyzed in terms of: Type of firm; location, plant capacity, and government contracts; employment data; labor turnover; industrial relations; recruitment; hiring policies; promotion; wages; training; technological innovations;

and techniques of projecting future personnel needs. (This survey was begun under a previous contract.)

**Status of Project:** Interviews have been completed, and a final report is expected in August 1968.

**Contract No.: 81-04-36**

**Contractor:** University of California at Los Angeles  
Institute of Industrial Relations  
Los Angeles, California

**Principal Staff:** Dr. Paul Prasow.

**Project Title:** Automated and Nonautomated Jobs in the Los Angeles Aircraft Industry

**Objectives and Procedures:** This longitudinal study is intended to determine: (1) the significant training and educational differences between the requirements for automated and nonautomated jobs; and (2) whether the criteria used by employers in the recruitment, selection, training, and placement of workers for automated jobs differ significantly from those for nonautomated jobs.

Data will be collected through questionnaires sent to sample groups of blue- and white-collar workers and their supervisors. Company records will also be analyzed.

**Status of Project:** Completion is scheduled for June 1968.

**Contract No.: 81-23-66-03**

**Contractor:** Cambridge Center for Social Studies  
Cambridge, Massachusetts

**Principal Staff:** Joseph M. Becker, S.J.

**Project Title:** An Investigation of Supplementary Unemployment Benefit Plans

**Objectives and Procedures:** This exploratory study is investigating several issues through informal discussions and unstructured interviews with selected employers in order to determine the following: (1) The circumstances under which various Supplementary Unemployment Benefit (SUB) plans come into

existence; (2) the chief modifications reflecting operating experience that have been made in SUB provisions; and (3) the actual experience of employers and workers under the plans, in terms of monetary and nonmonetary effects, as compared with the stated objectives of the plans.

**Status of Project:** Data collection and analysis have been completed, and the final report is due in fall 1967.

**Contract No.:** 81-09-67-17

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

**Principal Staff:** Samuel Baum.

**Project Title:** Occupational Classification Study

**Objectives and Procedures:** The objectives of this study are: (1) To provide national figures on the size and characteristics of occupational groups in the new *Dictionary of Occupational Titles* (DOT); (2) to provide data for use in preparing the Census Bureau's proposed DOT Occupational Classification Convertibility List; and (3) to provide the basis for the preparation of a Standard Occupational Classification for governmentwide use.

Entries from the job content sections (Industry, Occupation, and Class of Worker) of one month's *Current Population Survey* (CPS) are being transcribed and coded to the DOT. The information will then be merged with CPS information, tabulations run comparing census occupations with DOT, and the results presented by DOT classification.

**Status of Project:** A final report is expected in mid-1968.

**Contract No.:** MDTA 27-64

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

**Principal Staff:** Stanley Greene.

**Project Title:** Tabulations on the Relationship Between Patterns of Child Bearing and Labor Force Participation of Women

**Objectives and Procedures:** Data will be developed to provide new information on factors which influence the participation of married women in the labor force. Among these factors are the number of children and their ages, 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 size of family as well as family formation patterns to the husband's income. These data should provide new insights into the labor force participation of women in different socioeconomic situations.

**Status of Project:** Tabulations are scheduled for delivery in fall 1967.

**Contract No.:** 81-09-66-10

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

**Principal Staff:** David P. McNelis.

**Project Title:** Pretest Survey on Occupations and Educational Backgrounds of State and Local Government Employees

**Objectives and Procedures:** The objective of the study is to provide information on the feasibility of developing new occupational information on the characteristics of nonteaching personnel employed in State and local governments.

The study included two related surveys. Initially, there was a personal canvass of a sample of approximately 70 local governments of different size groups to obtain information on employees identified by agency of employment. This served as a basis for functional classification. There was then a mail canvass of the listed individual employees to obtain data on age, sex, education, duration of public employment, and related information.

These pretest surveys have provided information being used in the preparation of a report on the feasibility and probable cost of a large-scale survey to pro-

vide detailed data on the 4-million nonteaching persons who are full-time employees of State and local governments.

**Status of Project:** A final report is in preparation. Completion of the project is scheduled for fall 1967.

**Preliminary Highlights of Findings:** High rates of response at both survey stages underscore the feasibility of collecting occupational data from a nationwide sample of State and local governments.

**Contract No.:** 81-34-67-07

**Contractor:** Dr. Sol Chaneles  
New York, New York

**Principal Staff:** Dr. Sol Chaneles.

**Project Title:** Preparation of a Paper on the Central City Ghetto for the *1967 Manpower Report of the President*

**Objectives and Procedures:** Material provided by this study was used in the *1967 Manpower Report of the President*, in the chapter on joblessness and poverty in urban slums. The study was concerned with reasons for the underdevelopment of human resources in city slums and the steps which have been or should be taken in relieving the problem.

**Status of Project:** The report has been completed, and material based on it appeared in the *1967 Manpower Report of the President*.

**Contract Nos.:** 81-34-66-02, 81-34-66-29,  
and 81-34-67-25

**Contractor:** Columbia University  
New York, New York

**Principal Staff:** Dr. Eli Ginzberg.

**Project Title:** Employment Expansion in a Dynamic Economy

**Objectives and Procedures:** The objective of this continuing series of studies is to identify and analyze various economic sectors in order to determine the role of manpower resources in the expansion of the

Nation's economy. The following reports are being completed and will be available in book form in 1968:

1. "Paramedical Manpower and the Expansion of Health Services" analyzes the key determinants of changes in the supply of paramedical personnel (e.g., nurses, technicians, therapists, orderlies, etc.) with particular reference to the types of persons recruited; the educational and training structure; accreditation and licensing; financing of education; market forces, including wages and working conditions; and promotion and career opportunities.

2. "The Hard-to-Employ: European Experiences" describes the range of policies and programs developed by selected countries in Western Europe for the unemployed and underemployed under conditions of near "full employment." Such approaches as compulsory and subsidized employment, placement techniques, and job creation efforts are discussed, focusing on their applicability to the U.S. situation.

3. "Attachment to Work: An Exploratory Study" is a case study analysis of the strategic determinants of the career choices and patterns of young men as they leave high school. The study will investigate the manner in which individuals with modest education adapt to a changing work environment, the relation between unemployment experiences and efforts to develop skills; the acquisition and effectiveness of educational and training facilities in providing the Nation with an adequate supply of trained personnel for optimum economic growth.

4. "Patterns of Employment in the American Economy" is based on recently available material from the Bureau of the Census and the Office of Business Economics, U. S. Department of Commerce. It examines the ways and extent to which regions and localities have adapted to shifts in the economic structure, including job creation and job destruction, over the past two decades.

5. "The Peripheral Labor Force" inspects the labor force attachment of various demographic groups—women, teenagers, Negroes, and older workers—the members of which frequently work at part-time or part-year jobs. The report will focus mainly on recent trends in part-time work, and will distinguish between economic and noneconomic and voluntary versus involuntary reasons associated with such employment. The concentration of part-time part-year jobs among industries and occupations, and the ways in which the job market adapts to changes in demand and supply conditions involving the peripheral labor force are also covered.

Nine additional projects will be in progress during fiscal year 1968:

1. "Theory of Manpower" will investigate factors influencing the long-term supply of manpower from the vantage point of the individual, the employing organization, and society.

2. "The Political Economy of Health" will assess the changing structure of demand for health and medical services, with particular attention to the influences exerted by increasing governmental expenditures on hospital construction, research, medicare and medic-aid.

3. "Selected Facets of European Labor Markets" is a project relating to the entrance of youth into employment, mobility devices, and expanding employment in depressed areas. It will highlight the parallels and differences between the European and American job markets and their implications for U.S. manpower policy.

4. "Corporate Manpower Planning for a Changing Technology" will examine corporate manpower in the steel industry, and appraise the methods used by management to develop the skills and competencies required of its work force because of technological change.

5. "Portals to Work," an extension of a pilot research report (*Attachment to Work: An Exploratory Study*) on work establishment, will develop estimates of the employment opportunities available to workers below 25 years of age. The study will develop a typology of major systems of entry into work.

6. "Utilization of Paramedical Manpower" will determine the variability in utilization patterns by region and by type of medical organization, clarifying the theoretical and measurement problems involved in determining the "output" of health services.

7. "The Role of Manpower in Employment Expansion" is a continuation of the previous study of employment growth in Standard Metropolitan Statistical Areas—*Patterns of Employment Expansion in the American Economy*. It will consider the role of manpower as a resource potential or limitation, taking into consideration sex, race, and education.

8. "The Interface of Education and Employment Among Urban Minorities" will analyze the competence levels of labor force entrants relative to the skill levels required for available jobs. Critical economic and social considerations that affect the match between entrants and jobs will be identified.

9. "Explorations in Aging in the Ghetto: Withdrawal from Work" will investigate the process of dis-

engagement from the world of work as it affects older persons in city slums.

**Status of Projects:** Published reports of work previously conducted under these or earlier contracts include: *Economic Growth and Employment Opportunities for Minorities*; *The Pluralistic Economy*; *Scientific and Managerial Manpower for Nuclear Industry*; *Manpower and the Growth of Producer Services*; and *The Middle Class Negro in the White Man's World*. Five reports will be published in book form in 1968, and nine others will be in progress.

#### **Preliminary Highlights of Findings:**

1. "Paramedical Manpower and the Expansion of Health Services."

Paramedical personnel (all medical personnel except physicians and registered nurses) will increase, both in absolute numbers and relative to total medical manpower, because of the growing demand for health services, changes in medical organization, changes in medical technology, and the disparity in length of training time required between paramedical and professional personnel.

Since shortages are basically attributable to an inadequate supply of young women entering the field, any substantial increase in paramedical personnel must come from alternative sources. Concentrated effort is needed to attract men and older women re-entering the labor force into these occupations.

Turnover rates can be reduced through application of sounder management principles. However, low starting wages, excessive specialization, and low upward career mobility continue to make for an unstable labor force.

Shortages of health personnel can be further alleviated by equipping junior college curriculums and MDTA and Office of Economic Opportunity (OEO) health training programs with a greater variety of preparatory courses in paramedical occupations; by training more males, teenagers, and high school drop-outs; by expanding refresher training programs for older workers; and by extending paramedical job training in rural areas.

2. "The Hard-to-Employ: European Experiences."

Tight job markets have kept unemployment to a minimum in many Western European countries, and have been a deterrent to the accumulation of such hard-to-employ groups as exist in the United States. In addition, active job market policies, a devotion to the ideal of full employment, and an emphasis on work as a way of life have further minimized the number of hard-core unemployed in Western Europe.

Job market strategy in Western Europe is based on the principle that the adjustment of labor supply and demand is *not* an automatic function of the market. Labor force experts have advocated a coordinated program of special services in alleviating hard-core unemployment. Internal migrants are being directed to places where jobs exist; deficiencies in education and training are being remedied before migration; in areas of heavy population inflow, migrants are being received through organized programs to smooth social and employment adjustment; work is being brought to surplus labor areas; and migration is being restricted where housing or other services are inadequate.

These preventive measures have proved so successful that manpower planners in Western Europe have been able to devote attention to segments of the hard-to-employ (such as handicapped workers) which receive relatively little public consideration in the United States.

3. "Attachment to Work: An Exploratory Study."

The job opportunities and prospects for advancement available to a young man without a college degree were found to be largely dependent on whether he has an occupation—that is, whether he possesses skills transferable from one industry to another. Workers who have an occupation are more likely to find jobs through the external job market. On the other hand, workers who do not possess an occupation must usually depend on the comparatively erratic internal job market (organizations): they can take a position with limited potential in one firm, or they can continue to move from one low-wage job to another.

During the first few years of work, these young men show loose attachment to occupation, industry, or firm. Even as their job-changing propensities decline, degree of commitment will vary, depending on the income and security provided. Once having been employed, the regional wage level for the industry sets the upper limit to salary expectations, regardless of skills or education. Within complex internal job markets, length of service is the ultimate determinant of promotion prospects.

4. "Patterns of Employment in the American Economy."

Employment expansion has been most rapid in the medium-sized SMSA's over the last two decades. Non-city counties experienced considerable transition, with new jobs becoming available in manufacturing and consumer services as existing jobs were being eliminated in the primary industries.

In the SMSA's, employment expansion in business services has been an important source of new jobs, especially in the larger cities. Direct government employment (Armed Forces and public administration) and medical-educational services contributed significantly to employment expansion throughout the country during the past 10 years.

**Contract No.: MDTA 15-64**

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

**Principal Staff:** Dr. Aaron W. Warner.

**Project Title:** Obsolescence and Updating of Engineers' and Scientists' Skills

**Objectives and Procedures:** Information on the problems of technical skill obsolescence was obtained from about 40 organizations, through depth interviews with engineering managers and other directly involved executives. The data were analyzed in order to: (1) Identify the process of scientific and engineering skill obsolescence in typical occupations and industries, identify the areas which need investigation, and develop pilot techniques for assessing the size and nature of the problem; (2) outline the staffing and operational problems which skill obsolescence poses for research and engineering management; (3) appraise and evaluate the programs instituted by certain industrial firms for equipping obsolescent scientific and engineering personnel with new skills; and (4) develop concepts, information, and related techniques of investigation which will be useful for public and private agencies working on problems arising from obsolescence of scientific and engineering skills.

**Status of Project:** The study has been completed.

**Highlights of Findings:** Although a majority of the managers interviewed felt that the general problem was only of moderate seriousness, several types of situations, involving small numbers of professional research-development-design (R-D-D) personnel, were singled out as especially troublesome: (1) Motivating those R-D-D professionals (largely mature-age) whose skills have become outdated, and who have not updated themselves under the firm's continuing-

education programs or in other ways; (2) determining the disposition of skill-obsolent R-D-D personnel when reductions in the professional-technical work force become necessary; (3) identifying, developing, and updating competent project leaders, systems engineers, and other "key" practicing professionals, and motivating them to continue as practitioners in preference to moving into management positions; and (4) assessing the kind and degree of updating needed by technical managers, and providing the means and incentives necessary to bring about such updating.

To these might be added two manpower needs which cut across the more specific problem areas: (1) Devising and applying dependable performance appraisal programs for professional-technical employees; and (2) devising and conducting effective updating-education programs for all levels of professional-technical personnel.

**Contract No.: 81-09-67-20**

**Contractor:** U.S. Department of Defense  
Washington, D.C.

**Principal Staff:** Israel Rubir.

**Project Title:** Economic Impact of Defense Programs

**Objectives and Procedures:** The purpose of this contract is to implement selected substantive changes in DOD's semiannual survey, "Economic Impact of Defense Programs." These survey changes are intended to provide improved data on the impact of defense spending on employment at the State and local area level—by industry, by occupation, and by demographic characteristics. Information resulting from these changes appeared in the June 1967 survey.

The new material will provide the Department of Labor with a basis for planning and coordinating programs to facilitate manpower readjustments in the event of major changes in the levels and patterns of defense expenditures. The improved data are critical to the development of an "early warning system" that would permit prompt Departmental assistance in areas seriously affected by defense cutbacks.

**Status of Project:** The project should be completed by mid-1968.

**Contract No. 81-09-66-12**

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

**Principal Staff:** Alfred L. Green.

**Project Title:** Manpower and the Public Employment Service in Europe

**Objectives and Procedures:** Under this contract, a study was made of the role and effectiveness of the employment services in six European countries (Yugoslavia, France, Germany, Great Britain, the Netherlands, and Sweden) in the implementation of an active manpower policy. During the summer of 1966, a series of interviews was conducted with technicians and local office personnel and with other administrators concerned with the operation of the public Employment Service in each country. Special attention was given to the administrative and operational aspects of the programs which were considered significant to the effective implementation of an active manpower policy.

**Status of Project:** The project was completed in April 1967.

**Highlights of Findings:**

1. There is no single successful method of combination or of separation of Employment Service and unemployment insurance activities. In light of historical conditions and trends, continued experimentation and flexibility are desirable.

2. In all countries studied, the public Employment Service had been established primarily for dealing with unemployment rather than for assisting employers to find workers.

3. Independent, profitmaking employment agencies do not operate extensively in any of the countries except Great Britain.

4. Public Employment Services work most efficiently when a network of offices is set up to cover the territory and the administration is decentralized to enable prompt and efficient action in local job markets.

5. The interdependence of local job markets and the existence of a composite national job market make unified direction of Employment Services mandatory, regardless of the intermediate organizational pattern.

6. In all countries, the local office is suborganized by program, such as placement service, accelerated

adult vocational training service, welfare service for employed workers, etc. Within the placement service segment, suborganization may be by occupation, by industry, or by type of applicant.

7. In all countries, vocational guidance literature is published and made available to young people still in school, from elementary grades through the university level. Vocational guidance activities were equally effective whether administered exclusively by the Employment Service or the school system.

8. The interarea clearance system operating in the European countries is more effective and less complex than the U.S. system.

**Contract No.: 81-53-67-04**

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

**Principal Staff:** Harold Kuptzin, Tom Ritter.

**Project Title:** Development of a Model System of Occupational and Employment Information Under the Vocational Education Act of 1963

**Objectives and Procedures:** The aim of this pilot project is to develop a model information system for occupational and employment data. The model is intended to implement the Vocational Education Act of 1963 and related manpower development and training programs by enabling them to be more responsive to current and prospective job market requirements. Units of the Wisconsin State Employment Service and personnel of the national office of the Bureau of Employment Security will execute the study, working in cooperation with representatives of national, State and local vocational education agencies.

The model to be developed will provide inputs on various aspects of occupational and employment information, as well as labor demand for particular occupational groups in Milwaukee. These will be related to the basic factors affecting vocational education in the area and will be used to evaluate vocational education program goals so that curriculums can be made consistent with employment opportunities and job characteristics. Particular effort will be made to develop techniques and procedures for the effective exchange of information between the Employment

Service and vocational educational authorities at all levels of government.

**Status of Project:** Completion is scheduled for early 1968.

**Contract No.: 81-34-66-33**

**Contractor:** Greenleigh Associates, Inc.  
New York, New York

**Principal Staff:** Arthur Greenleigh.

**Project Title:** A Study of Those Not Working in a Tight Labor Market—Milwaukee, Wis.

**Objectives and Procedures:** This study was designed to identify the characteristics of a sample of unemployed but presumably employable adults in a community with a tight labor supply and to determine their employment-related needs, problems, and service requirements.

From a sample of 1,479 subjects—631 selected from substandard housing areas, 188 public assistance recipients, 156 Employment Service registrants, 164 from public housing developments, and 340 from casual settings—the study attempted through structured interviews to: (1) Identify the population of presumably employable yet unemployed adults; (2) ascertain their social, economic, vocational, employment, educational, training, and health characteristics; (3) assess their employment-related problems, their needs, and their potential for employment; and (4) determine the services and action programs necessary to increase their employability and reduce their unemployment.

**Status of Project:** The study was completed in January 1967.

**Highlights of Findings:** The study identified and classified the nonworking adults in four broad categories: (1) Individuals of prime working ages who are voluntarily idle and with apparent skill deficiencies which limit the range of jobs available to them; (2) younger persons of prime working age who recognize their skill deficiencies but are not motivated to acquire the needed skills and training; (3) older workers, unemployed a substantial period of time, lacking skills, experience, and a good work history; and (4) women who desire to work but presently have child-care re-



sponsibilities. The most common characteristic among the groups was the lack of adequate skills and preparation for competition in the job market.

The impediments to their employment included both individual, social, and institutional obstacles. Personal obstacles included insufficient education or training, poor attitudes or motivation, poor health, child-care responsibilities, and family or social relationship problems. Social and institutional obstacles included prejudice based on race, age or sex, and employer-established job requirements and recruitment and hiring procedures, such as specific minimum skills and educational levels, employment tests, and exclusion based on criminal records.

The study pointed out that there was no single solution to the problems of the employable unemployed, but suggested a broad program of four "strategies," including: (1) The establishment of specialized outreach and satellite programs, which should be both geographically and psychologically accessible, to engage these people in training activities; (2) the provision for special job-finding and entry arrangements for those who cannot find a job on their own, who have impediments, or who are not readily adaptable to the world of work; (3) continuing education and training programs for those who become actively employed to enable them to further their development and expand to their fullest potential; and (4) followup measures to help keep them in jobs long enough for job security to become real and meaningful.

**Contract No.:** MDTA 38-64

**Contractor:** Harvard University  
Cambridge, Massachusetts

**Principal Staff:** Dr. John Dunlop.

**Project Title:** Internal Labor Markets, Technological Change, and Labor Force Adjustment

**Objectives and Procedures:** This project was designed to investigate the impact of changes in production techniques upon production and maintenance jobs in selected manufacturing industries and to explore the operation and relative importance of internal and external job markets in the labor force adjustment processes necessitated by these changes. Information was gathered through personal interviews with key managerial staff in 20 manufacturing plants selected from 10 Standard Industrial Classifica-

tion industry categories. Data were collected on factors prompting management decisions to introduce technological innovations in production processes and on various mechanisms through which necessary adjustments in skill and experience level of the work force were effected.

**Status of Project:** The study was completed in October 1966.

**Highlights of Findings:** The central theme of the study is that differences between the existing skills of the labor force and the requirements for blue-collar jobs in manufacturing are reconciled through a series of instruments over which the employer, alone or in conjunction with a labor organization, exercises discretionary control. The study presents a model of the adjustment process between the labor force and the requirements of blue-collar manufacturing jobs.

The model is characterized by eight variables: (1) The job structure of the plant; (2) the administrative rules governing the internal allocation of labor; (3) the size and character of the labor force outside the plant; (4) recruitment procedures; (5) screening procedures; (6) training procedures; (7) hiring standards; and (8) compensation.

These variables constitute both the major determinants of a plant's labor costs and the instruments through which a plant adapts to changing technology and job market conditions. Since each variable has a cost attached to it, the mode of adjustment selected by plants will presumably reflect attempts to minimize these costs.

The study indicates that private adjustment mechanisms reliably and efficiently eliminate, at least for blue-collar jobs in manufacturing, imbalances between job requirements and the characteristics of the labor force. It suggests that Federal manpower programs should be directed toward the following objectives:

1. Providing general training outside the plant in basic mathematical and verbal skills. Programs of this kind will capture economies of scale in formal training and enhance the occupational flexibility of the labor force.
2. Subsidizing in-plant training programs where there is a likelihood that adjustment costs will be translated into price increases.
3. Subsidizing experimental training, screening, and recruitment programs as an incentive to developing new in-plant adjustment techniques.
4. Developing procedures for increasing the flow of information among plants about the various ad-

justment techniques currently being utilized and their relative costs.

**Contract No.: MDTA 29-64**

**Contractor:** Harvard University  
Cambridge, Massachusetts

**Principal Staff:** Dr. John Dunlop, Dr. James G. Scoville.

**Project Title:** The Job Content of the U.S. Economy, 1940-1970

**Objectives and Procedures:** This study was designed to develop improved concepts, measures, and procedures for analyzing the distribution of occupations within the Nation's employed labor force. These tools are expected to permit more detailed and accurate estimates of changes in the relative demands for labor resulting from technological and supply-demand developments.

Based on the assumption that more accurate groupings of occupations at various skill and responsibility levels are needed to provide better estimates of changing job requirements, the project attempted to develop such groupings through experimentation with past manpower data. The ranking of occupations was checked using tests such as job evaluation, relative wage levels, mobility patterns, and education and training levels. The various occupational categories developed were used to project employment levels for 1970.

**Status of Project:** The study was completed in October 1966.

**Highlights of Findings:** For the United States as a whole, the study showed wide differences in job content by region, industry, and sex.

Over the past 20 years considerable changes have occurred in the job family and content level distribution. The employment projections to 1970 suggest that these changes will continue.

The employment projections implied a move toward somewhat higher levels of education and training requirements and greater importance of more formal training procedures. It seems apparent that training requirements may not be best defined simply with respect to the entry job, but rather to the type of skills, abilities, and training characteristics of the overall family of jobs. Entry requirements are gen-

erally not the minimum needed for the job itself but reflect the content of jobs at higher levels.

To evaluate patterns of change and to facilitate projection, basic job data should certainly be collected more frequently than at the present 10-year intervals. To eliminate much of the need for broad occupational definitions and to obtain more informed responses, these data might be collected on an establishment or firm basis rather than from households as at present.

The major bar to the development of an effective measure of job content lies in the broadness of census occupational data and the lack of numerical information on the relevant criteria for job evaluation. The problem can only be resolved by a more detailed classification, in which the basic unit is the job, and not the vague, technically imprecise concept of an occupation, and where job characteristics are measured less in terms of aptitudes and temperaments and more in conformity with the customary concepts of job evaluation.

**Contract No.: 81-23-66-22**

**Contractor:** Harvard University  
Cambridge, Massachusetts

**Principal Staff:** Dr. John Dunlop, Dr. Peter B. Doeringer.

**Project Title:** Internal Adjustments in the Manufacturing Sector to Tightening Labor Markets and Skill Shortages

**Objectives and Procedures:** This is a case study investigation of the experience of 20 medium-to-large manufacturing plants in adjusting to diminishing labor supplies and skill shortages.

The plants being studied are located in Cleveland and Cincinnati, Ohio; Rochester, N.Y.; Boston, Mass.; and Providence, R.I. Industries represented include screw machine products, machine tools, electronics, iron and steel foundries, and men's apparel. Personal interviews are being conducted with corporate and local plant management personnel and with industrial engineers involved in job design. Data are being collected on such activities as recruiting, hiring, training, and wage determination.

Eight of the plants will be studied in depth, with personnel executives, industrial engineers, in-plant equipment designers, and selected lower level manage-

ment personnel also being interviewed, to measure over time the internal impact of the approaches used in adjusting to changing labor supply conditions. These additional interviews will seek quantitative data which reflect the effects of a transition from a loose to a tight labor supply on such variables as total employment, number of job classifications and incumbents, number and descriptions of jobs redesigned, compensation, training, hours of work, and promotion opportunities.

**Status of Project:** Visits to the selected plants are presently being conducted. Completion is scheduled for fall 1968.

**Contract No.: 81-23-67-23**

**Contractor:** Harvard University  
Cambridge, Massachusetts

**Principal Staff:** Dr. James G. Scoville.

**Project Title:** A Study of the Conceptual Bases and Uses of Various Manpower and Occupational Systems

**Objectives and Procedures:** This study will examine existing manpower and occupational classification systems (including the *Dictionary of Occupational Titles*) and their underlying principles, purposes, and uses. Special attention will be given to: (1) Determining how the ultimate utilization of job data affects the methods of its collection and aggregation; (2) developing and refining concepts used in describing jobs or occupations; and (3) aggregating the various job classification systems into a more flexible framework for dealing with manpower and occupational questions. The researcher will conduct informal interviews with selected users and developers of various forms of occupational information to obtain, on a case study basis, accounts of data needs, untapped sources of information, and potential for improved data utilization. These case studies will be supplemented with material on various occupational classification systems collected from secondary sources.

**Status of Project:** Completion is scheduled for fall 1969.

**Contract No.: 81-15-66-17**

**Contractor:** Illinois Institute of Technology  
Chicago, Illinois

**Principal Staff:** Dr. Thomas J. McNichols, Dr. Elmer H. Burack.

**Project Title:** Management and Automation

**Objectives and Procedures:** This project will develop information on the effects of improvements in industrial technology on the activities and job requirements of managers and supervisors. New personnel skills, educational backgrounds, or individual characteristics that may be required of supervisory and middle-management workers in firms undergoing technological advance will be examined in terms of their influence on manpower planning.

Two types of approaches will be combined to disclose interrelated details of technological-managerial changes. Four companies will be studied in depth, utilizing records, interviews, questionnaires, and observations; and 40 companies will be surveyed on a more limited basis. All companies will be selected by size and level of technology and will be located in the midwestern States.

**Status of Project:** Completion is scheduled for late 1967.

**Contract No.: MDTA 5-64**

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

**Principal Staff:** Dr. Walter H. Franke.

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

**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 information that can be used in achieving 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 job placement processes and institutions in removing or lessening the shortages. Studies are being undertaken in the St. Louis and Chicago metropolitan areas in the following occupations: Licensed practical nurses; medical technologists; tool and die makers; tool and die designers; engineering technicians, electronics; and engineering technicians, metalworking.

**Status of Project:** Completion is scheduled for late 1967.

**Preliminary Highlights of Findings:** Findings indicate that labor shortages existed in all of the six skilled and technical occupations studied even though there was not a general shortage of labor at the time. These shortages had persisted over extended periods of time and were related in various combinations for the different occupations to such factors as insufficient training facilities, turnover of trainees and journeymen, costs of training for both trainee and company, lack of systematic recruitment and counseling efforts, unsatisfactory wages and working conditions, and the attraction of alternative employment opportunities.

**Contract No.: OAM 5-63 (G)**

**Contractor:** International Labour Organisation  
Geneva, Switzerland

**Principal Staff:** N. Franklin.

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

**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 decreasing. 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 among countries. The

similarities and differences in the extent and form of government involvement in these problems will also be analyzed.

**Status of Project:** Completion is scheduled for late 1967.

**Contract No.: OAM 5-63 (D)**

**Contractor:** International Labour Organisation  
Geneva, Switzerland

**Principal Staff:** Sven Grabe.

**Project Title:** Training of Maintenance Workers

**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. The project also will furnish material for determining action required to assure appropriate training of these maintenance workers.

**Status of Project:** Field investigations have been conducted in several European countries and interviews and observations made in selected plants in the chemical and bakery industries. Completion is scheduled for late 1967.

**Contract No.: 81-09-66-15**

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

**Principal Staff:** William Gerber.

**Project Title:** Study of Wage and Hour Standards as Applied to Bona Fide Trainees in Other Countries

**Objectives and Procedures:** An in-depth study will be made of the experiences of other countries in setting wage and hour standards through government and through collective bargaining for on-the-job trainees. The researcher will also examine the economic aspects, administrative practices, and social structures of areas where wage and hour standards

are applied to training programs. Information will be sought through a questionnaire sent to labor attaches and labor reporting officers at selected U.S. overseas posts.

**Status of Project:** Completion of the project is scheduled for fall 1967.

**Contract No.: MDTA 23-64**

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

**Principal Staff:** Harry J. Greenspan.

**Project Title:** Estimates of Employment Requirements by Occupation for 1970

**Objectives and Procedures:** The principal objectives of the project are:

1. The development of projections for occupational patterns in 1970 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. The preparation of a computer-oriented system for the application of projected occupational patterns to industry employment projections.

Data from the latest *Census of Population* and other sources, together with studies of technological change and other factors likely to modify past trends, will be used to prepare detailed 1970 occupational patterns for industries. These occupational patterns will be suitable for application to industry employment estimates now being prepared in connection with the Economic Growth Project of the Bureau of Labor Statistics.

**Status of Project:** Completion is scheduled for fall 1967.

**Contract No.: 81-09-67-10**

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

**Principal Staff:** William Milligan.

**Project Title:** Survey of Employment and Unemployment in Slum Areas in 10 Cities

**Objectives and Procedures:** A survey of slum dwellers in 10 cities was made in which data were obtained through field enumeration, on a wide range of social and economic characteristics, with particular emphasis on factors associated with employment, employability, and the mechanics of jobseeking.

**Status of Project:** The results of the survey were used in the *1967 Manpower Report of the President*.

**Contract No.: 81-09-66-07**

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

**Principal Staff:** Carl Rosenfeld.

**Project Title:** Extent of Volunteer Work, November 1965

**Objectives and Procedures:** The study will test the feasibility of obtaining national data on the numbers and types of persons doing unpaid volunteer work and on the amounts of time contributed by unpaid volunteer workers in such activities.

The required information has been collected through individual questionnaires filled out by members of approximately 4,000 households as a supplement to the November 1965 *Current Population Survey*.

**Status of Project:** Completion of the tabulating and the analysis is scheduled for fall 1967.

**Contract No.: 81-09-66-08**

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

**Principal Staff:** Edgar Weinberg.

**Project Title:** Job Redesign for Older Workers: 10 Case Studies

**Objectives and Procedures:** The objectives of the study were to ascertain the existence of specific instances of job redesign for older workers in American plants, and to obtain detailed information about these instances in terms of the type of jobs and workers involved, the kinds of changes that were made, and the benefits, costs, and problems resulting from job redesign.

A mail canvass of 500 companies located possible cases of job redesign which might be studied more intensively through personal visits. Intensive studies were then made of the 10 companies with job redesign experiences related to the problems of older workers. A team of investigators visited each company and interviewed plant officials.

**Status of Project:** The study was completed in April 1967.

**Highlights of Findings:** Job redesign for older workers has been carried out in large and small establishments, and in a wide variety of manufacturing industries.

Job redesign has been applied in a range of jobs, affecting individuals with varying personal characteristics. Some older workers whose jobs were redesigned were employed in low-paid jobs, such as porters; others were semiskilled machine operators; and a few were highly skilled craftsmen. Most of the workers affected were older men and women in relatively good physical condition whose job performances showed no substantial decline, but there were several cases of workers whose ailments had significantly reduced their work capacity.

Informal actions by foremen or plant managers to modify jobs to older workers' capacities were the typical case; formal programs were less frequent.

Job redesign for older workers usually involved very little financial outlay for new equipment, and scarcely any loss in output due to work interruption. Most of the cases of job redesign required either rearrangements of work assignments or slight changes in work areas or layouts. The few cases in which major investments for new equipment were required usually reflected normal costs of introducing improved machinery or techniques.

Job redesign for older workers generally resulted in improved productivity. In several cases, a substantial rise in output per man-hour in the operation resulted from job redesign; in no case was produc-

tivity adversely affected. The quality of the work improved in some cases. Mechanization of work previously done by hand resulted in considerable labor savings. Significant productivity gains also resulted from rearrangement or reallocation of tasks among groups of old and young workers.

Job redesign was found to have some advantages for both the older worker and management over the practice of reassigning older workers to other jobs. The older worker is kept on a job he knows, in his customary workplace, rather than being shifted to work and surroundings with which he is unfamiliar. He continues to use his skills, thereby maintaining his morale and avoiding a reduction in earning capacity. Skilled employees can be retained where no job openings are available to which they could be reassigned, or where early retirement is not feasible. Management can avoid expensive labor turnover, and often can achieve higher productivity.

**Contract No.:** 81-24-66-14

**Contractor:** The Lafayette Clinic  
Detroit, Michigan

**Principal Staff:** Dr. Albert F. Ax.

**Project Title:** Validation of a Physiological Test of Aptitude for Learning Social Motives

**Objectives and Procedures:** This study related motivation, an important element in achievement, to physiological responses to various stimuli in developing tests for use in selecting and assigning persons for training.

The aptitude for learning social motives, and therefore motivation itself, is acquired. Since the autonomic nervous system (ANS) controls most bodily processes which accompany motivation, it is believed that there is a relationship between ANS characteristics and achievement of individuals. For example, the conditioning of physical responses to specific stimuli may affect both motivation and achievement of individuals. Thus, it has been already demonstrated that there are relationships between life achievement and individual differences in the conditioning of palmar sweating responses to different sounds.

Conditioning to other autonomic processes was applied to several populations, including MDTA trainees. The influence of the ANS on the learning and per-

formance of the trainees was separated out of the total matrix of education, intelligence quotients, relevant experience, and psychiatric and other influencing variables. Using these approaches, this study is expected to provide the following results: (1) A practical test of aptitude for learning new motives which may help to assign trainees appropriately and may help fit the training to the needs of the person; (2) an approach to the objective measurement of current motivation during performance; and (3) a contribution to the understanding of motivational development.

**Status of Project:** The final report is scheduled for fall 1967.

**Preliminary Highlights of Findings:** The hypothesis that the relatively less motivated subjects will demonstrate less discriminative autonomic conditioning has been confirmed with high statistical confidence. Since the two criterion groups were quite similar on most other variables likely to contribute to their performance in the skills center training program, these findings lend support to the hypotheses that aptitude for acquiring social motives may differ among individuals who manifest differences in motivated performance, and that autonomic discrimination conditioning can serve as an index of the motivational learning aptitude. Several psychological tests also contribute to the diagnosis of low motivational status.

**Contract No.: 81-19-37**

**Contractor:** University of Maryland  
College Park, Maryland

**Principal Staff:** Dr. George A. Pownall.

**Project Title:** Employment Problems of Released Prisoners

**Objectives and Procedures:** This pilot study investigates the employment problems of released prisoners and evaluates their experiences in the light of their preprison educational background and job experiences, and their vocational or work-related training in prison. The information gathered will serve as a basis for recommendations to improve vocational training programs in correctional institutions and to increase employment opportunities for released prisoners. A secondary objective is to develop suggestions

for improving the reporting system through which employment and related data on parolees are collected, based on an analysis of parole reports on file with the U.S. Bureau of Prisons.

Information is being obtained through interviews with parolees in the Baltimore and Philadelphia areas and from official records. Detailed information is being gathered concerning parolees' jobseeking efforts, wages, satisfaction with employment, and reasons for not seeking work if not gainfully occupied. In order that the longitudinal information will be complete, interviews are also being scheduled with parolees who return to prison.

**Status of Project:** Completion is scheduled for fall 1967.

**Contract No.: MDTA 17-63<sup>3</sup>**

**Contractor:** The University of Michigan  
Ann Arbor, Michigan

**Principal Staff:** Dr. J.R.P. French, Jr., Dr. Gerald Gurin, Dr. David Bradford.

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

**Objectives and Procedures:** This study seeks to evaluate the attitudes and motivation of MDTA trainees. Information is being sought from 6,000 trainees—2,000 by means of personal interviews and 4,000 through written questionnaires administered by MDTA instructors. Trainees are being 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 employment, 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—at enrollment, on completion of the program (or on dropping out), and 6 months after training is completed. Postprogram job histories, including relevance of training to subsequent employment and to effectiveness of job performance, will be related to attitudinal and motivational changes, to certain demographic characteris-

<sup>3</sup> This project is being sponsored jointly with the U.S. Department of Health, Education, and Welfare.

tics of the trainees, to their mobility histories, and to previous labor force experience.

Ratings of trainees' performance in posttraining jobs will be sought from the supervisors of about 1,000 of the trainees. Personal interviews will be used to validate data obtained from the written questionnaires and to explore certain variables in greater depth.

**Status of Project:** Completion is scheduled for late 1967.

**Preliminary Highlights of Findings:** Some preliminary findings are available from the pretraining questionnaire. The responses indicate that the trainees who dropped out of the program to take jobs differed from the group of trainees who completed the program mainly in that they were under greater economic pressure at the time they entered the program. They were less certain that the training allowances would be adequate, they felt that they would have to work to supplement payments, they were more often married, and they more often had very young children. They also had less savings and more debts. Their greater economic concern, therefore, was a realistic reflection of their more precarious economic situation.

**Contract No.: MDTA 7-64**

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

**Principal Staff:** Dr. Louis A. Ferman.

**Project Title:** The Negro and Equal Opportunities: A Review of Management Experiences in 20 Companies

**Objectives and Procedures:** This project was concerned with the problems that arise when an equal employment program is applied in a business enterprise. Detailed information was elicited on the practices, procedures, and experiences of business concerns, unions, and workers in developing and applying an equal employment program enabling Negro workers to assume jobs hitherto unavailable to them. Information was developed through case studies in-

volving personal interviews with executives and local plant managers of approximately 40 business firms with white and Negro employees. Most of the firms had union representation. The equal employment policies, programs, and procedures of the firms were evaluated and, where possible, patterns of experience prevalent among the companies were identified.

**Status of Project:** The study was completed in spring 1967.

**Highlights of Findings:** Study findings indicate that if Negro workers are to be successfully integrated into the work force: (1) Top level management must be genuinely and totally committed; (2) management must become positively involved in personal contact with the Negro community; (3) power to force action should be lodged in a competent and aggressive senior executive; and (4) the equal employment program must be flexible and responsive to changing needs and therefore subject to continuous review.

The findings of this study also include an analysis of both successful and unsuccessful procedures and practices which should furnish valuable guidelines for the development of programs of nondiscrimination in employment.

**Contract No.: 81-24-66-32**

**Contractor:** Michigan State University  
Rural Manpower Center  
East Lansing, Michigan

**Principal Staff:** Dr. Harvey M. Choldin, Dr. Grafton Trout.

**Project Title:** The Mexican American Migrant Farmworker in Transition

**Objectives and Procedures:** This study will describe the process by which Mexican American migrant farmworkers drop out of the migrant stream, settle in northern communities, and adjust to new labor force requirements and opportunities. It will also delineate factors affecting the settling-in process and stabilization of migrant workers in selected communities, with specific attention to occupational aspects and income regularization.

Personal interviews will be held with 700 migrants



and 100 community leaders in selected "dropout" areas focusing on demographic information, occupational background, motivation for dropping out of the migrant stream, kinship and friendship ties, job aspirations, interest in training and retraining, and community reactions.

**Status of Project:** Initial interviews are scheduled for the fall of 1967. Completion of the study is scheduled for mid-1968.

**Contract No.: MDTA 9-63**

**Contractor:** Michigan State University  
School of Labor and Industrial  
Relations  
East Lansing, Michigan

**Principal Staff:** Dr. Einar Hardin, Dr. Sigmund Nosow, Dr. Michael Borus.

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

**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 sets of estimates are being developed: (1) Private benefits and costs to participating individuals; (2) social benefits and costs, covering the impacts on the national economy; and (3) budget impacts, covering changes in government tax receipts and expenditures.

Data on benefits were collected largely from trainees and control groups by means of personal interviews. The interviews covered personal characteristics and sociopsychological 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:** Completion of the study is scheduled for early 1968.

**Contract No.: 81-22-30**

**Contractor:** University of Minnesota  
Educational Research and Development  
Council of the Twin Cities Metropolitan Area  
College of Education  
Minneapolis, Minnesota

**Principal Staff:** Dr. Howard E. Bergstrom.

**Project Title:** Job Performance of Young Workers in Relation to School Background

**Objectives and Procedures:** The main objective of this project was to develop a method for predicting job success by relating a worker's high school background to the most desirable qualifications for a worker in his particular occupation. This method of measuring a worker's employability could be useful in defining requirements for entry-level jobs and for strengthening high school programs.

A sample of 1963 male high school graduates was interviewed regarding their employment experiences since graduation. The sample included graduates from a suburban comprehensive high school, an urban comprehensive high school, and an urban vocational high school. Data on individual educational backgrounds were obtained from school records, and employers and immediate supervisors have been interviewed for employment information.

**Status of Project:** The project was completed in late 1966.

**Highlights of Findings:** Communication skills and personal adequacy were more significant in terms of job success among the graduates included in the study than were specific job-related skills. Young men from all three kinds of schools were successful in obtaining jobs related to their training. However, since a greater proportion of vocational school graduates had received training, more of them obtained related jobs. Performance in school as measured by grades was not particularly relevant to success on the job, but poor school attendance was associated with poor job performance.

**Contract No.: 81-22-01**

**Contractor:** University of Minnesota  
Minneapolis, Minnesota

**Principal Staff:** Dr. Rene Dawis.

**Project Title:** Work Attitudes of Unemployed Youth

**Objectives and Procedures:** This study is intended to determine the attitudes, needs, expectations, beliefs, and perceptions of unemployed youth and their relation to desirable and undesirable work experience. The socioeconomic characteristics associated with these subjective attitudes will also be explored. Data on work attitudes will be compared with job experience records to assess the extent to which attitudes govern employment success or failure.

The study will compare three samples of 100 individuals each drawn from Minneapolis public high schools, including recent high school graduates, students identified by their school counselors as potential dropouts, and recent dropouts. The young people in each sample will be queried periodically for a year after the first contact as to their job-finding time if employed, pay rate, number of jobs held, time employed, and job satisfaction. Variables believed to influence employment experience will be evaluated through tests, questionnaires, and interviews. These variables are level of education; attitudes, needs, expectations, beliefs, and perceptions; jobseeking behavior; work history prior to data-collection period; aptitudes; and demographic variables such as age, race, parental occupation, and parental education.

**Status of Project:** Completion is scheduled for late 1967.

**Contract No.:** 81-24-25

**Contractor:** University of Missouri  
College of Education  
Columbia, Missouri

**Principal Staff:** Dr. H. H. London.

**Project Title:** A Followup Study of MDTA Trainees in the Cities of St. Louis, Kansas City, and Joplin, Mo.

**Objectives and Procedures:** The purpose of this study is to evaluate the effectiveness of MDTA training for approximately 500 people who completed training sessions in Missouri during 1965. Their original placements are being checked and they and their employers interviewed at periods of 6, 12, and 18 months later. The project will test an approach for

compiling data needed to analyze and evaluate the effectiveness of the training program. Since this study covers an 18-month posttraining period, it will serve as a validation for the present statistical reporting system (designed to follow up trainees 6 months and 12 months after completion of the course), as well as furnishing data for an additional 6 months of posttraining activities.

**Status of Project:** Completion is scheduled for late 1967.

**Contract No.:** MDTA 34-64

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

**Principal Staff:** Dr. Virgil Rogers.

**Project Title:** Adapting Educational Change to Manpower Needs in Quincy, Mass., and Wood County (Parkersburg), W. Va.

**Objectives and Procedures:** This project was designed to help schools reorient their vocational education programs, and to assist them in identifying opportunities for shifting to broader and more general concepts of vocational education. The study sought to determine means of adapting educational systems to current and future technological requirements.

Information was collected over a 2-year period from administrative staffs, school boards, townsmen, club groups, students, and PTA's in two very different school districts—Quincy, Mass. and Parkersburg, W. Va. The data pointed out the changing vocational and manpower demands on the school system and described recent Federal legislation designed to provide assistance in this broad area.

**Status of Project:** The project was completed in October 1966.

**Highlights of Findings:** Study findings indicated an interesting pattern of experiences:

1. Both communities systematically went about preparing their staffs, facilities, school boards, and citizens for study and improvement of the educational program to meet the changing vocational needs of their youth and adults.

2. The school officials initiated studies within the faculty while soliciting help from the outside as the

staff attempted to identify shortcomings and needs and to diagnose the problems encountered. There were no attempts to cover up or evade the issues as they were brought under consideration.

3. Educational philosophy and practice were examined with a view to their being modified through involvement of faculty in committees, discussions, and planning sessions. Careful plans were made to encourage wider acceptance by teachers and students of vocational-technical education as comparable to the so-called liberal studies or college preparatory course offerings.

4. In both communities the administrations recognized their financial limitations and proceeded to explore other sources of revenue in the public as well as the private sector.

5. In each community the administration maintained effective communication with the board of education during all phases of its planned activity.

6. A broad drive at upgrading and expanding the role of the counseling and guidance departments in the pilot schools helped considerably in changing student attitudes on "prestige courses" or "major selections," and particularly for initiating realistic and objective analyses of student interests, aptitudes, and purposes in counseling and occupational planning.

**Contract No.: 81-34-66-28**

**Contractor:** National Educational Television and Radio Center  
New York, New York

**Principal Staff:** Henry C. Alter.

**Project Title:** Choice: Challenge for Modern Women

**Objectives and Procedures:** Under this contract, a series of 12 half-hour television panel discussion programs, entitled "Choice: Challenge for Modern Women," was made available for national distribution among educational television stations. The series, originally produced on videotape by the University of California Extension Service in conjunction with a local area television station, presented panel discussions on a broad range of questions pertinent to the role of women in contemporary society. Under this contract, N.E.T. was to transcribe the programs to 16 mm. film and make them available for programming by its 105 affiliated stations. It was anticipated that broader dissemination of this information would

promote fuller utilization of the Nation's trained womanpower.

**Status of Project:** The project was completed in September 1966. The films and a syllabus discussion guide have been made available at a nominal cost to the 105 stations affiliated with the N.E.T. network. Organizations interested in viewing the films or obtaining copies of the syllabus discussion guide should contact their local ETV station, or Mr. Henry C. Alter, Director of Educational Service, N.E.T., 10 Columbus Circle, New York, N. Y., 10019.

**Contract No.: 81-34-66-13**

**Contractor:** National Industrial Conference Board, Inc.  
New York, New York

**Principal Staff:** Dr. Daniel Creamer.

**Project Title:** Role of Job Vacancies—Case Study of Rochester, N.Y., in 1965

**Objectives and Procedures:** This project will evaluate the usefulness of job vacancy data in understanding how labor areas operate. Four series of analyses will be made of data relating to the Rochester area:

1. *Stability of job vacancy statistics.* Variations over time in the total number and composition of job vacancies by employer, occupation, industry, and other relevant groupings will be measured. The data used will be based on 392 employers, each of whom reported job vacancies in February, May, and August 1965. The seasonal impact on job vacancy variability, the duration of the vacancy, and educational and experience requirements will be determined.

2. *Job vacancies, labor turnover, and growth of the firm.* This analysis will measure the extent to which the number of job vacancies reported by a firm can be explained by the firm's growth, wage levels, average hours worked, and accessions and separations. A model based on these variables will be developed.

3. *New hires, overtime, and transfers.* A key element in employment decisions is the expense of hiring and training new workers. Hiring cost data already compiled for Rochester firms will be used to construct an economic model of the hiring process which employs hiring costs as a determinant in the choice between use of overtime and the hiring of new employ-

ees, and the related decision as to the occupational level at which to hire.

4. *Some imbalances—structural and institutional.* This analysis will determine whether the number of unemployed has been less, equal to, or greater than the number of job vacancies. The number of unemployed who have the educational and experience qualifications required to fill the job vacancies reported by employers will be estimated. A summary report will be prepared and an article published on each of the four studies.

**Status of Project:** A final report is scheduled for fall 1967.

**Contract No.:** 81-09-66-31

**Contractor:** National Manpower Policy Task Force  
Washington, D.C.

**Principal Staff:** Dr. Frederick Harbison, Dr. Garth L. Mangum.

**Project Title:** Identifying Needs and Priorities in Manpower Research

**Objectives and Procedures:** Current manpower information will be reviewed and assessed in relation to the need for new and changing manpower policies, programs, and research. This will be accomplished through liaison with government and the research community, and through the preparation of special papers and reports on the state of knowledge on priority policy issues.

**Status of Project:** The project is expected to run through fiscal year 1968.

**Contract No.:** MDTA 22-64<sup>4</sup>

**Contractor:** National Opinion Research Center  
Chicago, Illinois

**Principal Staff:** Dr. Peter Rossi.

**Project Title:** Graduates of Predominantly Negro Colleges—Class of 1964

<sup>4</sup> This project is being cosponsored by the U.S. Departments of Labor and Health, Education, and Welfare (National Institutes of Health), and the National Science Foundation.

**Objectives and Procedures:** The portion of this study which is sponsored by the Department of Labor will attempt to determine the employment aspirations, career decisions, and plans for graduate training of a group of 1964 Negro college graduates. These plans will be evaluated in the light of the graduates' attitudes toward their school, the social situations on campus, and the graduates' concepts of employment prospects. The study involves the use of a questionnaire which has been sent to a stratified sample of Negro students attending both predominantly Negro and predominantly white universities.

**Status of Project:** Completion is scheduled for fall 1967.

**Preliminary Highlights of Findings:** The graduates sampled were from low-income families. Their parents had had little schooling and worked in low-skill jobs. Broken homes, with the mother acting as family head, were prevalent.

The southern high school system from which these Negro college students emerged is comprised of small public schools which seldom offer a college preparatory curriculum, provide relatively few years of foreign languages, and graduate only a small proportion of seniors who enter college.

More Negro women go to college than do men. Negro coeds have a clearly defined work orientation, and a large proportion anticipate combining marriage and family responsibilities with careers. Teaching is the profession most frequently entered by Negro women, although they express confidence in their own abilities to pursue other careers. Despite high employment expectations, many graduates of both sexes said they had no assurance of a job after graduation.

Many of the graduates seemed to disregard the broadening number of job opportunities becoming available to Negroes. They had typically decided what they wanted to do fairly early in life, and remained firmly committed to their original career choice. But the majority realized that more jobs are being opened to Negroes in all occupations, especially in the larger northern cities. They felt that present job prospects for Negroes are best in the military, education, and social work fields, and poorest in business particularly in executive and administrative positions.

A large proportion of the graduates wanted to attend graduate school, but few planned to begin post-graduate work immediately.

While the Negro college graduate was typically ambitious and self-confident, he seemed to appraise his own prospects in terms of the great majority of

American Negroes who have not "made it." Data indicate that the Negroes themselves will continue to work to improve their status, but a dramatic equalizing change will require further and more extensive effort by society as a whole.

**Contract No.: 81-08-20**

**Contractor:** National Planning Association  
Washington, D.C.

**Principal Staff:** Dr. Leonard Lecht.

**Project Title:** Manpower Needs for National Objectives in the 1970's

**Objectives and Procedures:** This project is based on an earlier phase of the National Planning Association's Goals Project which estimated the private and public costs of pursuing national objectives in the 1970's.<sup>5</sup> The primary objective of the present study is to develop projections of manpower requirements by occupation for 1975 for the achievement of national objectives in education, health, housing, space, plant and equipment, and other areas. Manpower projections are being prepared for major occupational groups and for the individual occupations within each group for some 30 economic sectors.

While many significant projections of manpower needs already have been made for the next decade, a distinctive element in the present work is that it will offer a framework for relating occupational requirements to national objectives from which overlapping implications relative to the gross national product have been removed.

**Status of Project:** Completion of the project is scheduled for fall 1967. A preliminary report has been submitted, and the final report is being pre-

**Preliminary Highlights of Findings:** Results of the study indicate that simultaneous achievement of the proposed national goals in 1975 would require an employed civilian labor force of more than 100 million, over 10 million above the expected number at full employment. This means that while our manpower resources will be adequate for considerable

<sup>5</sup> Leonard A. Lecht, *The Dollar Costs of Our National Goals* (Washington: National Planning Association, Center for Priority Analysis, May 1965), Research Report I.

progress in the next decade, they will not likely be sufficient to achieve all the objectives simultaneously. Consequently, choices will have to be based on an assessment of resources, costs, and benefits.

Vigorous pursuit of these goals can be expected to occupy fully the Nation's projected labor force, even a labor force whose efficiency is above the average for the postwar period. Substantial progress toward these objectives would create more job opportunities for society's unutilized and underutilized human resources.

The actual pattern of the kinds of jobs which our economy will require in the next decade will be significantly influenced by the Nation's choice of priorities. For example, emphasis on such objectives as health and education would primarily increase the demand for professional workers, while goals such as urban development would primarily increase the demand for blue-collar workers.

**Contract No.: 81-09-67-08**

**Contractor:** National Planning Association  
Washington, D.C.

**Principal Staff:** Dr. Leonard Lecht.

**Project Title:** Research on Manpower Implications of National Goals and Public Programs

**Objectives and Procedures:** The principal objective is to develop a system for evaluating the manpower impacts of public programs and private activities which affect national goals. This project involves two elements: (1) The preparation of estimates of manpower requirements and prospective shortages which are likely to result from the pursuit of national objectives in the next decade, using as examples combinations of programs designed to cope with poverty; and (2) the performance of service functions for the Department of Labor, including the preparation of estimates of the impact of various manpower programs, preparation of reports covering manpower areas of special interest, and alerting the Department to new developments affecting manpower requirements and important new research in the manpower field.

The initial phases of the research will be exploratory in nature and will concentrate on developing supply projections for individual occupations. These projections will attempt to indicate manpower require-

ments by occupation, industry, sex, and race for alternative priority combinations.

**Status of Project:** A final report is expected for fall 1967.

**Contract No.:** 81-09-66-16

**Contractor:** National Science Foundation  
Washington, D.C.

**Principal Staff:** Dr. John K. Folger.

**Project Title:** Symposium on Manpower Theory

**Objectives and Procedures:** The symposium was designed to explore the usefulness of current theories of career choice, manpower supply and demand, and occupational and professional recruitment. The relevance of current theories to the structure of manpower policies and the design of manpower research was also analyzed.

**Status of Project:** The symposium was conducted at Airlie House, Warrenton, Va. on November 3-5, 1966. The proceedings have been reprinted in the spring 1967 issue of *The Journal of Human Resources*.

**Highlights of Findings:** The symposium discussions were organized around four papers. The first described the current supply and demand for highly educated manpower. The remaining three, written from the viewpoint of a psychologist, a sociologist, and an economist, examined the contribution of their respective disciplines to an improved understanding of current manpower problems.

Dr. John Folger of the Commission on Human Resources and Advanced Education, who directed the Conference for the National Science Foundation, spoke on the balance between the supply and demand for college graduates. He examined projections for indications of possible fiscal or other restraints which might limit the anticipated expansion in the number of graduates. He concluded that the supply of graduates with bachelor's degrees is likely to be more than adequate to meet demand over the next decade.

Dr. John L. Holland, vice president for research and development of the American College Testing Program, reviewed some of the implications of current theory and knowledge related to occupational

choice and drew a series of conclusions regarding their value in manpower planning.

In a paper entitled, "The Economics of Scientific and Engineering Manpower," Dr. W. Lee Hansen of the University of Wisconsin attempted to define some of the issues in current discussions of alleged manpower shortages in these occupations by surveying the various positions taken by interested parties, alternative approaches to research in the field, and some of the analytical efforts of economists. He explored the projection approach, and recommended application of the rate-of-return approach to studies of demand-supply trends in these occupations. Finally, he questioned current concern about shortages of scientific and engineering manpower in light of what little research has been done in this field.

Dr. C. Arnold Anderson of the Comparative Education Center of the University of Chicago, speaking on "The Adaptation of Education to a Mobile Society," maintained that the American educational system is quantitatively adequate to meet any demands for high-level manpower likely to be imposed during the next few decades. The qualitative disparities within the system, where not actually beneficial, can be readily corrected without major efforts.

**Contract No.:** 81-34-66-25

**Contractor:** New York University  
New York, New York.

**Principal Staff:** Dr. Daniel E. Diamond.

**Project Title:** A Study of the Relationship of Industry Hiring Practices to the Employment of Disadvantaged Groups

**Objectives and Procedures:** This study is designed to compare formal and informal hiring requirements with actual job performance needs in a number of occupations, and to investigate the characteristics and employability of jobseekers from disadvantaged groups who are capable of meeting actual job performance requirements. The study is expected to cover 15 to 20 occupations in a minimum of 3 areas in different parts of the country.

**Status of Project:** Completion is scheduled for mid-1968.

**Contract No.: MDTA 26-64**

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

**Principal Staff:** Dr. Robert R. Cadmus, Dr. James P. Harkness.

**Project Title:** A Manpower Study of Clinical Laboratory Personnel, Including Medical Technicians

**Objectives and Procedures:** This pilot project is concerned with the job skills required of individuals performing laboratory tests in hospitals in North Carolina. The jobs of the randomly sampled personnel range from laboratory assistant and medical technologist to clinical pathologist. Information has already been obtained by interview on a variety of background factors, including education and training. Relationships among laboratory activities, skill in laboratory procedures, and individual backgrounds are being examined in an attempt to sort out the various levels of skill required in the field of medical technology. Skill levels required for various clinical laboratory tasks will be related to the appropriate educational requirements.

**Status of Project:** Completion is scheduled for late 1967.

**Contract No.: 81-35-67-27**

**Contractors:** North Carolina State University at Raleigh  
Raleigh, North Carolina

North Carolina Agricultural and Technical College at Greensboro  
Greensboro, North Carolina

**Principal Staff:** Dr. Charles H. Rogers (NCSU); Benjamin Harris (NCA&TC).

**Project Title:** Generic Bases of Negro Teenage Unemployment: A Preliminary Investigation

**Objectives and Procedures:** This study will investigate the reasons—educational, psychological, famil-

ial, sociological, and situational—for the excessively high rate of unemployment among Negro teenage youth in rural communities. Secondary objectives include: (1) Formulation of recommendations for remedial programs; and (2) development of a plan for possible further research into the problem of constructing and operating a program tailored to meet the needs of these youth.

In two adjacent rural counties in North Carolina, a study in depth will be made of a stratified sample of 256 out-of-school teenage youth who graduated or dropped out of high school in 1966. Interviews will probe the job-hunting techniques, knowledge of the job market, employment experience, aspirations, and self-image of the teenagers, as well as their family background, education, and training. A sample of employers and school officials will also be interviewed and their responses used in an evaluation of job opportunities, community attitudes, and the adequacy of educational and training facilities available to Negro youth in the area.

**Status of Project:** Completion is scheduled for fall 1968.

**Contract No.: 81-22-35**

**Contractor:** North Star Research and Development Institute  
Minneapolis, Minnesota

**Principal Staff:** Dr. Guy H. Miles.

**Project Title:** Effects of Vocational Training and Other Factors on Employment Experience

**Objectives and Procedures:** The overall objective was to explore the degree to which vocational training contributes to employability, taking into account the interrelationships between training and a broad range of other factors relevant to employability.

A feasibility study was conducted in Hennepin County, Minn. to test the extent to which a household survey can produce the desired data, the extent to which these data are reliable, and the extent to which the individuals responding are typical of the general population. Data were obtained on the individual's employment record for the past 3 years, his vocational training, and several other factors such as formal education, health record, military status, and the socioeconomic level of the childhood home.

**Status of Project:** On the basis of the feasibility study, it was determined not to proceed with a proposed 2-year program covering urban, mining, and agricultural areas in Minnesota.

**Contract No.: 81-20-34**

**Contractor:** Northeastern University  
Department of Economics  
Boston, Massachusetts

**Principal Staff:** Dr. Morris A. Horowitz, Dr. Irwin L. Herrnstadt.

**Project Title:** Evaluation of the Training of Tool and Die Makers

**Objectives and Procedures:** This study is designed (1) to identify and evaluate the various avenues of skill acquisition—education, training, and work experience leading to journeyman status as a tool and die maker and (2) to determine the effectiveness of existing institutions, methods, and practices in providing workers with skills of a journeyman tool and die maker that are responsive to industry's demands.

In the first phase of this study, a sample of tool and die makers employed in a number of firms in selected metalworking industries in the Boston SMSA was surveyed, and data were collected relative to the nature and extent of the education, training, and work experience that led to the workers' acquiring journeyman status as tool and die makers.

In the second phase of the study, the actual job requirements in the selected firms will be related to the range of skills possessed by the sample subjects and the avenues through which these skills were acquired. This will be accomplished through the development of a taxonomy—based on personal interviews with the firms' foremen and production personnel—of the actual day-to-day tasks performed in the firms. The sample of tool and die makers will then be intensively interviewed to determine their range of skills and the degree to which these skills are utilized in their day-to-day job assignments.

By interrelating actual job requirements in the firms with the extent of skills possessed by the sample of journeymen and the paths through which these

skills were acquired, the researchers will seek to evaluate the most effective patterns of skill acquisition relative to industry needs and to draw implications concerning the effectiveness of existing methods, practices, and institutions through which these skills are obtained.

**Status of Project:** A comprehensive report on phase I of the study is presently in preparation. Phase II of the project is scheduled for completion by mid-1969.

**Contract Nos.: 81-34-28 and 81-08-38**

**Contractors:** The Ohio State University Research Foundation  
Columbus, Ohio

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

**Principal Staff:** Dr. Herbert S. Parnes, The Ohio State University; and Demographic Surveys Division, Bureau of the Census.

**Project Title:** Longitudinal Study of Labor Force Behavior

**Objectives and Procedures:** The initial objective of the study is to identify and explore the interrelations among factors influencing the work behavior and experience of four population samples: Young men and women, 14 to 24 years old; men 45 to 59; and women 30 to 44. Available data on employment and unemployment by demographic, occupational, and industrial characteristics permit the identification of some of the reasons for the job difficulties of these (and other) groups (e.g., inadequate education or discriminatory hiring practices). What is not known, however, is the interaction among economic, sociological, and psychological variables that permits some members of a given age-education-occupation group to have satisfactory work experience while others do not. The study is expected to generate the most comprehensive body of data on labor mobility that has ever been produced, albeit for restricted segments of the labor force.

Six consecutive interviews will be held a year apart with each of the four population samples. The Bu-



reau of the Census is responsible for drawing the samples and for conducting the interviews. Ohio State will analyze results and prepare reports on the surveys for each age-sex group.

The interview schedules for the initial survey will include the collection of extensive work histories of the respondents and of information that will permit construction of psychometric and sociometric profiles of the respondents. Both initial and subsequent interviews will involve in-depth questioning on labor force behavior and motivation.

**Status of Project:**

1. Initial interviews and first followup interviews have been completed for older men.

2. Initial interviews have been completed for younger men and older women.

3. Initial interviews for younger women and the first followup interviews for younger men are scheduled for the fall of 1967.

4. A report covering the findings of the initial interviews for older and younger men is expected in early 1968.

**Contract No.: 81-38-66-20**

**Contractor:** Oklahoma State University of Agriculture and Applied Science Research Foundation  
Stillwater, Oklahoma

**Principal Staff:** Dr. Barry Kinsey, Dr. Larkin B. Warner, Dr. Robert Sandmeyer.

**Project Title:** The Determinants of Labor Force Participation Rates in the Ozark Low-Income Area

**Objectives and Procedures:** This study is concerned with an exploration of various factors associated with labor force participation rates in a rural low-income area. The first phase of the project is a feasibility study which is designed to serve as a foundation for a further project (involving a field survey). The full study would seek to identify more specifically the differences in social and economic characteristics which lead to variations in labor force participation.

The survey work would utilize an instrument or set

of instruments combining the questionnaires from the Current Population Survey of the Bureau of the Census with supplemental questions aimed at exploring the factors affecting an individual's labor force status. The ultimate objective is to use the information developed from this project, if appropriate, and the subsequent field survey project to evaluate existing manpower policies as they apply to rural low-income areas, and to recommend programs aimed at alleviating general underutilization of human resources in such areas.

**Status of Project:** A report on the initial feasibility phase of the study is scheduled for December 1967.

**Contract No.: 81-40-67-21**

**Contractor:** Pennsylvania State University  
University Park, Pennsylvania

**Principal Staff:** Dr. Jacob J. Kaufman, Dr. Louis Levine.

**Project Title:** University Research Consultation Conference

**Objectives and Procedures:** This project was designed to test whether university leadership and conduct of a research conference is an effective means of facilitating an interchange of information between government and the research community on manpower issues and changing research emphases. A pilot conference was arranged by Pennsylvania State University and conducted at the University of Illinois in May 1967.

A more specific purpose of the conference was to apprise selected university faculty actively engaged in teaching and research in the manpower-related disciplines, of recent Federal legislation, policy, and program developments in the manpower area. Prospective research problems were identified, and a forum was provided for the interchange of ideas on how the academic community might best contribute to the advancement of national manpower goals.

**Status of Project:** A report of conference proceedings is expected by fall 1967.

**Contract Nos.: 81-40-67-05 and  
81-40-67-09**

**Contractors:** Pennsylvania State University  
University Park, Pennsylvania

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

**Principal Staff:** Dr. Jacob J. Kaufman, Dr. David W. Stevens.

**Project Title:** A Study to Determine the Influence of Supplemental Labor Market Information on the Job-seeking Behavior of Selected Groups of Unemployed Workers

**Objectives and Procedures:** This research will test a plan for facilitating placement of jobseekers. An experimental program will be undertaken in which certain unemployed workers visiting a local office of the State Employment Service will be given the names of employers who are known to employ workers with skills similar to their own. This information will be given in addition to the usual services provided to all applicants by the local office.

Through followup interviews, the success of these workers in finding jobs will be compared with that of a control group receiving only normal services. The two groups will be matched so as to minimize the effects of other characteristics, such as age, sex, color, marital status, and occupation.

**Status of Project:** Completion is scheduled for spring 1968.

**Contract No.: MDTA 14-64**

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

**Principal Staff:** Richard Clanoff, Dr. Aaron Spector, Dr. Saul Leshner, Dr. Ralph Ormsby.

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

**Objectives and Procedures:** Underlying this project is the belief that emotional, psychological, and motivational factors operate to incapacitate many long-term unemployed individuals so that they can neither participate in the world of work nor benefit from vocational training or retraining. It is also believed that these handicaps can be overcome through specific prevocational services consisting of work adjustment or social work assistance (for personal and family problems) or both.

The original research design called for provision of these services, separately or in combination, to one-half of the persons who were determined to need them. By comparing the training and subsequent employment records of those who needed and received the services with those who needed but did not receive them, the researchers would attempt to determine whether specific programs of assistance provided to the long-term unemployed significantly improved their employability and trainability.

The relationships between the personal work background characteristics of the men who received both work adjustment and social work counseling and their work capacity and amount of stress experienced are being given special attention.

**Status of Project:** Completion is scheduled for early 1968.

**Preliminary Highlights of Findings:** Early progress reports indicate that persons identified as needing social work assistance usually need work adjustment counseling. As a result of this finding, the research sample that provided for social work assistance exclusively was eliminated.

Early followup interviews also indicate that people who needed and got services have been enrolled in MDTA training courses in higher proportions than those who needed but did not receive such services.

The relatively high rate of program completion (68 percent) of the very hard-core groups, which needed and got both types of services, indicates that this group does benefit from a comprehensive vocational rehabilitation approach.

However, even with the services provided, more than 1 out of every 5 of the men was found to be not competitively employable. Study findings highlight the different kinds of problems faced by the long-term unemployed, suggesting the need for in-

dividual evaluation and differential work rehabilitation programs.

**Contract No.: 81-05-67-06**

**Contractor:** Philco Corporation  
Western Development Laboratories  
Palo Alto, California

**Principal Staff:** Dr. A. B. Chalupsky.

**Project Title:** Exploratory Study of Job Performance Aids and Their Potential Impact Upon Training Requirements and Manpower Utilization

**Objectives and Procedures:** Job performance aids include a variety of items ranging from simple manuals to sophisticated electronic equipment. They offer a potential means of enhancing work performance so that job requirements may be reduced, thereby permitting the use of workers with less natural capacity, skills, and training.

This exploratory study was designed to review and synthesize the results of research into the application of job performance aids. It also made a preliminary assessment of the potential value of job performance aids for (1) influencing government manpower policies; (2) realigning job requirements and manpower resources; and (3) modifying personnel selection, training, and utilization practices. A review and analysis of job performance aid research and development was made. This was supplemented by field visits to a sample of establishments to determine job performance and utilization in two occupational areas: electronic assembly and nursing patient care.

**Status of Report:** The project was completed in May 1967.

**Highlights of Findings:** The results show that, depending upon their design and usage, job performance aids can compensate for lack of training and experience, improve job quality, and increase productivity. Evidence is generally lacking concerning the extent to which job performance aids can compensate for basic aptitude deficiencies.

Job aids are most effective where jobs are complex, have long work cycles, or involve infrequently performed tasks. They become less practical where tasks are subdivided into short cycles and repetitive operation.

34

**Contract No.: 81-40-66-24**

**Contractor:** Dr. Frank C. Pierson  
Swarthmore College  
Swarthmore, Pennsylvania

**Principal Staff:** Dr. Frank C. Pierson.

**Project Title:** Preparation of a Paper on Professional and Supporting Personnel for the 1967 Manpower Report of the President

**Objectives and Procedures:** A study of professional and supporting personnel was made for use in the 1967 Manpower Report of the President. It provided information on current and prospective patterns of labor supply and demand; training and retraining; utilization (including utilization of subprofessional personnel); educational and other hiring specifications in relation to actual job requirements; salaries; working conditions; and promotional opportunities and how they affect labor supply, utilization, and worker mobility.

**Status of Project:** Work was completed and material based on it was incorporated in the 1967 Manpower Report of the President.

**Contract No.: 81-32-67-19**

**Contractor:** Princeton University  
Princeton, New Jersey

**Principal Staff:** Dr. Stanley Black, Dr. Frederick H. Harbison.

**Project Title:** Systems Analysis and the Labor Market

**Objectives and Procedures:** The ultimate objective of this project is the development of a series of models, based on systems analysis techniques, which would be capable of yielding predictions of the effects of external pressures and alternative manpower policies upon the job market system. For instance, the models could be expected to anticipate the likely effects of sudden changes in the level of aggregate demand on the size of the labor force, on unemployment rates for various subsets of the population,

2 new

and on the balance between supply and demand in various occupational and industrial submarkets.

During the first year of this projected 3-year study, the researchers will seek to develop a preliminary theoretical macromodel of the U.S. job market system and test its feasibility for analyzing the processes of manpower adjustment.

**Status of Project:** A report covering the first year's activity is expected in the summer of 1968.

**Contract No.: 81-13-33**

**Contractor:** Purdue Research Foundation  
Lafayette, Indiana

**Principal Staff:** Dr. Alfred S. Drew.

**Project Title:** A Study of the Need for Educational and Training Adjustments in the Apprenticeship Programs for Selected Craft Occupations

**Objectives and Procedures:** This study will develop models of apprenticeship programs in selected craft occupations. Special attention will be given to incorporating built-in procedures for adapting to technological change.

Questionnaires and other survey instruments have been developed and utilized by an interdisciplinary research staff from the fields of industrial education, engineering, sociology, psychology, and economics, in order to secure data on the format, content, and effectiveness of current apprenticeship training programs. Information is being obtained from apprentices in training, their instructors, journeymen craftsmen, teacher-educators, and labor and management representatives. Areas to be examined include basic subject matter such as mathematics and trade technology, the background of qualified instructors, on-the-job training, and provisions for developing desirable attitudes.

**Status of Project:** Completion is scheduled for early 1968.

**Contract No.: 81-32-31**

**Contractor:** Research Triangle Institute  
Durham, North Carolina

**Principal Staff:** Dr. A. L. Finkner.

**Project Title:** Employment Problems of Young Men Who Do Not Meet Mental Requirements of the Selective Service System

**Objectives and Procedures:** This pilot study assessed the vocational potentials, problems of vocational adjustment, and special assistance needs of a small group of young men who failed the Selective Service mental test. A methodology for a national survey of mental rejectees was constructed from the results.

Techniques for measuring the ability of the mental rejectee to adjust to work requirements or to obtain employment through remedial action programs were developed and tested on a sample of 103 mental rejectees. The sample was drawn from North Carolina to reflect an urban-rural mix and from Baltimore to represent a large industrial metropolitan area. Because of the high rate of nonresponse on the part of rejectees (an active sample of 200 had originally been proposed), alternative approaches for data collection in a national survey were suggested.

**Status of Project:** The final report was received in June 1967.

**Highlights of Findings:** The 103 rejectees who participated in the pilot study sample were found to be encountering severe problems in civilian life. For example, 28 percent were unemployed at the time of the survey (March-April 1966). The average job tenure was 7 months. Sixty-five percent of the rejectees worked as unskilled laborers, and over 56 percent earned less than \$1.50 per hour.

A majority of the rejectees demonstrated relatively low vocational potential and low intelligence, as measured by the General Aptitude Test Battery and the Wechsler Adult Intelligence Scale, but about 25 percent possessed sufficient conceptual and motor aptitudes to handle semiskilled or even skilled occupations. For these, underemployment was a serious problem, with skill potential often exceeding the requirements of their jobs. An interviewing and examining team composed of a clinical psychologist and a psychiatric social worker found that nearly 50 percent of the rejectees showed symptoms of significant psychological health problems.

Such findings suggest the need for the following remedial efforts to increase the employability of rejectees: (1) Programs to improve the level of basic education and language expression; (2) programs to

develop rudimentary arithmetic skills; (3) programs to improve psychological health; and (4) greater availability of jobs in line with vocational potential.

**Contract No.: MDTA 81-04-27**

**Contractor:** San Jose State College  
San Jose, California

**Principal Staff:** Dr. R. P. Loomba.

**Project Title:** A Study of the Unemployment and Reemployment Experiences of Scientists and Engineers Laid Off by 62 Aerospace and Electronics Firms in the San Francisco Bay Area During 1963-65

**Objectives and Procedures:** The study was concerned with the analysis of selected aspects of the unemployment and reemployment experiences of a sample of 1,200 engineers and scientists permanently laid off by 62 defense-oriented aerospace and electronics companies in the San Francisco Bay area during 1963-65. By means of mail questionnaires, the study: (1) Identified laid-off scientists and engineers in terms of personal and social characteristics, nature and duration of education, employment history, and other factors; (2) investigated the adequacy of other income sources during the layoff period; and (3) analyzed the job search procedures which were utilized.

**Status of Project:** The study was completed in the spring of 1967.

**Highlights of Findings:** More than half the laid-off engineers and scientists subsequently found reemployment in commercial jobs without undergoing retraining.

Further, the data also suggested that:

1. While unemployment insurance was the most commonly used source of financial support for the engineers and scientists, in general it proved inadequate. More than half the engineers and scientists who remained unemployed for 4 weeks or less had to liquidate savings and investments.

2. Direct application to companies was the most efficient method used by the engineers and scientists in obtaining reemployment.

3. Outplacement services offered by employers, al-

though not a commonly used method, were relatively more efficient than private employment agencies, the public Employment Service or services of professional societies and trade and professional magazines.

4. It appears that defense employers do not give reasonable advance notice of pending layoffs to engineers and scientists. One-half of the engineers and scientists who were laid off by the defense-oriented companies received advance notice of less than 8 days.

**Contract No.: 81-05-66-11**

**Contractor:** Stanford University  
Institute for the Study of Human  
Resources  
Stanford, California

**Principal Staff:** Dr. Joseph Katz, Dr. Harold A. Korn, Dr. Max M. Levin.

**Project Title:** Decision Process and Determinants in Occupational Choice

**Objectives and Procedures:** This is a 2-year investigation of the occupational decision process and the determinants of occupational choice. The impact of the following factors on the occupational decision is being studied: (1) Influential persons; (2) occupational information and experience; (3) motivations and attitudes to work and career; (4) personality characteristics; and (5) socioeconomic status.

In the first year, 1,200 subjects randomly selected from two different student populations were examined through questionnaires regarding their vocational interests, aptitudes, and personality characteristics. About 240 randomly selected subjects were given intensive interviews to substantiate information obtained from psychometric instruments and the questionnaires. In the second year, the same psychometric instruments were readministered to the original 1,200 subjects and a new questionnaire was devised to register changes in occupational choice and to elicit determinants of such changes in the intervening 1-year period. The same 240 subjects were reinterviewed.

**Status of Project:** A final report is scheduled for late 1967.

**Contract No.: MDTA 18-64**

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

**Principal Staff:** Dr. Wallace Mandell, Dr. Clyde Sullivan.

**Project Title:** Restoration of Youth Through Training

**Objectives and Procedures:** A training program at Rikers Island, undertaken and financed by the New York City Department of Correction, gave occupational training before release to 112 young inmates, aged 16 to 21 years. The research study was concerned with the implications of such training for the future careers of the youth.

An experimental group was trained as operators of electronic data processing equipment. The training was on a full-time, 6-day-a-week schedule combining job training, literacy instruction, and self-management counseling. Placement services, counseling and guidance, and family referral services were also provided during the postrelease period, and the experiences of the trainees were compared with those of a matched control group of 127 young men. Both the experimental group and the control group had to pass an aptitude test designed for electronic data processing jobs, and an I.Q. score of 80 or more on the revised Beta test.

**Status of Project:** Completed in April 1967.

**Highlights of Findings:** The findings of this project indicate that meaningful vocational training can be given in a local jail, even though the inmates are serving relatively short terms. Although nearly all trainees were school dropouts, they were capable of absorbing technical training. After at least a year's experience in the community, almost twice as many trainees as compared to controls were with the same company. Perhaps more importantly, twice as many had been promoted on their jobs. Recidivism among the trainee group was significantly lower than among the control group, although the postrelease periods ranged from 1 to 3 years.

**Contract No.: 81-24-67-02**

**Contractor:** Survey Research Center  
University of Michigan  
Ann Arbor, Michigan

**Principal Staff:** Dr. Eva Mueller, Dr. John Parker, Dr. John Sonquist.

**Project Title:** Study of the Impact of Changes in Machine Technology on a Cross Section of the Labor Force

**Objectives and Procedures:** This study will assess the impact of automation on a cross section of the labor force. Data will be obtained on the extent to which people see recent changes in their job content and employment conditions as being brought about by changes in machine technology. This study will also focus on the effects of perceived technological changes on people's career decisions, expectations, aspirations, and skill utilization.

The field survey will cover a stratified probability sample representing all households in the continental United States. In all, 2,800 households will be included in the sample, and personal interviews held with all occupants who are in the labor force.

This study is expected to add significantly to our knowledge of the pervasiveness and nature of various work changes resulting from changing machine technology, and the consequences of such changes for occupational progress and career decisions.

**Status of Project:** Completion is scheduled for September 1968.

**Contract No.: 81-05-67-18**

**Contractor:** Systems Development Corporation  
Santa Monica, California

**Principal Staff:** Dr. Marvin Adelson, Dr. Joseph Fink, Dr. Harvey M. Adelman.

**Project Title:** Research Program on the Application of Systems Analysis to Manpower Adjustment

**Objectives:** This is an exploratory study to test whether systems analysis techniques can be used to enhance current methods of dealing with manpower problems. The initial research will determine what

aspects of the systems approach can be practicably applied in the development of manpower policy and planning.

Interviews will be held with representatives of government, industrial, and academic organizations concerned with manpower problems. Interview results will be supplemented with historical data and used to determine the requirements for developing a working model, based on systems analysis concepts, for dealing with problems of manpower adjustment.

**Status of Project:** A report on the feasibility study is expected by mid-1968.

**Contract No.: 81-37-03**

**Contractor:** Temple University  
Philadelphia, Pennsylvania

**Principal Staff:** Herman Niebuhr, Jr.

**Project Title:** Dialect Remediation Training in Philadelphia, Pa.

**Objectives and Procedures:** This research complements an experimental and demonstration program conducted by Temple University. The demonstration project trained 160 young Negro women with language problems related to dialect in occupations requiring communication skill. Because of their dialects, the employability of the students in these occupations was severely limited.

Two groups of 80 persons each were matched on the basis of level of maldialect, age, and intelligence. Each group attended remedial English classes which were identical except that the experimental group participated in programmed remediation lessons and a technique of paired students serving both as teachers and pupils.

The project will test the efficiency of the special techniques in aiding the group to get jobs in fields where skill in communication is essential. It also will explore sociopsychological factors related to speech remediation and motivation for employment.

Three types of data were collected during the training phase: Phonetic distortion levels and grammatical achievement before and after remediation training; levels of performance for individuals and for paired students for each phonetic program; and levels of aspiration, motivation, and ethnic identification, before and after remediation training.

The followup phase will consist of the collection and evaluation of data on types of jobs, degree of responsibility, accuracy of performance, employers' rating of communication facility, fellow employees' evaluation of ability to communicate, employers' rating of general demeanor, and employees' rating of job satisfaction and future plans.

**Status of Project:** Completion is scheduled for fall 1967.

**Contract No.: 81-46-66-01**

**Contractor:** University of Texas  
Austin, Texas

**Principal Staff:** Dr. F. Ray Marshall, Dr. Vernon M. Briggs.

**Project Title:** Negro Participation in Apprenticeship Programs

**Objectives and Procedures:** The study was designed to provide information for the development of recommendations for promoting Negro participation in apprenticeship programs. These recommendations were to be based on a study of the apprenticeship situation in 10 major cities with large Negro populations—New York, Philadelphia, Cleveland, Pittsburgh, Cincinnati, Detroit, Washington, San Francisco-Oakland, Houston, and Atlanta. Information was collected through unstructured interviews with Negro apprenticeship applicants, apprentices, and dropouts; with Negro and white journeymen; State and Federal apprenticeship officials; joint apprenticeship committees; and vocational counselors and other related individuals and groups.

**Status of Project:** The final report was received in December 1966.

**Highlights of Findings:** Some of the report's recommendations included:

1. A strengthening of Federal and State antidiscrimination measures to bring swift action against offenders—preferably fines, injunctions, and denial of the use of public schools for related training. Emphasis, however, should be on voluntary compliance.
2. Provision of specialized programs to overcome general educational disadvantages, and preapprenticeship programs to increase the supply of qualified Ne-

groes. Some of the Job Corps programs should be thus oriented.

3. Summer jobs for minority youngsters in industries with apprenticeable trades to acquaint them with the trades and working conditions.

4. Development of a job ladder from the crafts to related supervisory and professional jobs, so as to raise the status of the crafts.

5. Increasing the responsibility of municipal governments and their agencies in promoting apprenticeship for minorities, since the racial situation varies by city, and union apprenticeship programs and construction jobs are also peculiarly local in nature.

6. Encouragement by the Federal government of voluntary nondiscrimination programs by employers and unions.

7. Gaining employer support in assuring that testing and other selection procedures are not unnecessarily restrictive to minorities, and in working with civil rights organizations to recruit Negroes.

8. Stimulation of the international unions to put into trusteeship locals which are the worst offenders in discrimination.

9. Enlisting the aid of civil rights organizations to improve the supply of applicants, recruit likely trainees, and provide tutoring and counseling as needed. (The Workers Defense League methods would provide valuable guidelines.)

10. Establishment of cooperative working arrangements with human relations agencies, companies, employers' associations, and unions, applying pressure only where warranted.

**Contract No.: 81-09-67-26**

**Contractor:** University of Texas  
Austin, Texas

**Principal Staff:** Daniel O. Price.

**Project Title:** Research Conference on the Changing Occupational Patterns of Negroes

**Objectives and Procedures:** The Department of Labor and the Equal Opportunity Employment Commission cosponsored a conference in the summer of 1967 which provided a forum for the discussion of recent developments in research on the changing occupational patterns of Negroes. Among the specific

objectives of the conference were: (1) A comparison of the various research approaches now in use; (2) a matching of research approach with problem area to obtain optimum results; (3) an assessment of the extent to which research findings are complementary and reinforce conclusions already established; and (4) determination of whether findings form a pattern from which further conclusions or research leads can be derived.

**Status of Project:** A report of conference proceedings is expected in late 1967.

**Contract No.: 81-09-67-22**

**Contractor:** The W. E. Upjohn Institute for Employment Research  
Washington, D.C.

**Principal Staff:** Dr. Sidney Fine.

**Project Title:** The Feasibility of a Direct Method of Obtaining Manpower Demand Data

**Objectives and Procedures:** This study will test an alternative method of collecting occupational data and compare it with the job title method now used by the Bureau of Labor Statistics in its employment surveys of occupations in selected industries. With the experimental method, manpower data will be obtained directly from employers through interviews and mail questionnaires. Survey techniques are designed to yield objective job content information based on the functional classification system of the 1965 *Dictionary of Occupational Titles*.

A sample of firms in a single industry will first be asked to complete forms similar to those used by the BLS in its occupational surveys. Then, during personal interviews, similar employment data will be collected. Classification will be based on actual job content as described in the DOT. Data will be analyzed to determine if the experimental method is more effective. Subsequently, a variety of industries will be sampled to see if the experimental method can be adapted successfully for use with mail questionnaires.

**Status of Project:** Completion is scheduled for late 1968.



**Contract No.: 81-09-67-13<sup>6</sup>**

**Contractor:** The W. E. Upjohn Institute for Employment Research  
Washington, D.C.

**Principal Staff:** Dr. Harold Sheppard.

**Project Title:** Analysis of Minority Group Employment Data

**Objectives and Procedures:** This study will consist of a comprehensive analysis of minority group employment data, collected for the first time early in 1966 in a survey of employers covered under the provisions of title VII of the Civil Rights Act of 1964. The data represent the first quarter 1966 employment experiences of minority group workers and were collected from over 120,000 employers covered under the act.

The analysis will seek to: (1) Evaluate the data for policy implications and recommend priorities for implementing compliance and technical assistance programs conducted under the Civil Rights Act; (2) compare minority group employment experience among industries, geographic areas and occupational levels, by sex, by specific minority groups, and in relation to the total work force; and (3) improve the annual survey questionnaire instrument and the methodology for future data collection.

**Status of Project:** A final report is expected by fall 1967.

**Contract No.: 81-24-66-04**

**Contractor:** Wayne State University  
Detroit, Michigan

**Principal Staff:** Dr. Ross Stagner, Dr. Reuben Baron, Dr. Alan Bass.

**Project Title:** The Role of Social Reinforcement Parameters in Facilitating Trainee Motivation, Learning, and Job Performance

**Objectives and Procedures:** This project seeks to identify the motivational conditions which will enable unemployed trainees to obtain maximum benefits from

<sup>6</sup> This project is being conducted jointly with the Equal Employment Opportunity Commission.

job retraining programs. An individual's idea of himself affects his reactions to rewards and punishments, and is also related to how much work he will do. This research is aimed at determining what methods of dispensing social rewards will be most effective in changing the self-impression and, therefore, the subsequent job performance of trainees.

Subjects for this study were trainees participating in ongoing projects conducted by local agencies of the Employment Service. The project is conceived as a series of interlocking laboratory and field experiments. Factors being studied include level of past social deprivation, praise of the person versus praise of his performance, abstract versus concrete rewards, consistent versus sporadic rewarding, and the effect of rewards administered by the subject's peer group versus those administered by an authority figure (the experimenter or instructor). Dependent variables include changes in self-impression, performance in the laboratory tasks, and subsequent performance in the training situation and in jobseeking behavior and job performance.

**Status of Project:** A final report is scheduled for fall 1967.

**Preliminary Highlights of Findings:** One experiment related in a recent progress report was concerned with the effects of types and sources of rewards. In one condition, the reward was given by the experimenter; in another condition, it was given by one peer; and in still another, it was given by three peers. Both positive and negative rewards were tested under these three conditions. In general, it would seem that positive rewards were more effective for the men than negative rewards. For the girls, on the other hand, the type of reward seemed less important; if anything, negative rewards were in some cases more effective.

On the quantitative tasks, the experimenter is apparently the most effective source of reward for the men. On the verbal task, however, the three-peer condition was more effective. The girls, however, performed best and their self-evaluation improved most when the source of reward was three peers. The one exception was that the objective task was performed best when the experimenter was the source of reward.

Another experiment was concerned with the relative effects on persistence both in the presence and absence of an experimenter, of different sources of reinforcement given prior to the commencement of a task when the task involved was actually insoluble. In one condition, reinforcement was given by the experimenter; in another, by one peer; and in still another, no reinforcement was given at all. Preliminary findings indi-

cate that subjects persisted longer at the insoluble puzzle when they had been reinforced by their peers.

Other preliminary findings suggest that individualized instruction as opposed to group instruction may not always be desirable, and that praise of the person is more effective than praise of his performance, both in raising a trainee's self-impression and in improving his task performance.

**Contract No.: 81-53-67-03**

**Contractor:** University of Wisconsin  
The Center for Studies in Vocational  
and Technical Education  
Madison, Wisconsin

**Principal Staff:** Dr. Gerald Somers.

**Project Title:** A Conference on Research in Apprenticeship Training

**Objectives and Procedures:** Over 100 specialists in the field of apprenticeship training, representing the academic community, private foundations, and government agencies, participated in a conference at the University of Wisconsin. Its purpose was to stimulate research into problems of contemporary apprenticeship training and to encourage broader dissemination of pertinent research findings. Position papers and reports of recent apprenticeship training were presented and discussed.

**Status of Project:** A report of the conference proceedings is expected by fall 1967.

**Contract No.: 81-53-67-12**

**Contractor:** University of Wisconsin  
The Center for Studies in Vocational  
and Technical Education  
Madison, Wisconsin

**Principal Staff:** Dr. Gerald G. Somers, Dr. J. Kenneth Little.

**Project Title:** Conference on the Education and Training of Racial Minorities

**Objectives and Procedures:** A research-oriented conference, held at the University of Wisconsin in May 1967, brought together researchers from the academic community, private foundations, and government agencies concerned with the general problem of improving the employability of and employment opportunities for minority group workers. The purpose of the conference was to report on the results of recent research on the education and training of racial minorities and to highlight areas needing further study.

**Status of Project:** A report of the proceedings is expected in early 1968.

**Contract No.: MDTA 14-63**

**Contractor:** University of Wisconsin  
Industrial Relations Research Center  
Madison, Wisconsin

**Principal Staff:** Dr. James Stern, Dr. David Johnson.

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

**Objectives and Procedures:** The researchers were concerned with developing information on the extent and characteristics of shifts from blue-collar to selected white-collar occupations. A sample of employers was canvassed to determine the number and kinds of shifts made, and about 450 workers in the Milwaukee area who had made such shifts were interviewed. Analyses in the final report covered patterns of job shifts, skills which are transferable, training or skill acquisition processes used by successful shifters, and the relationship of such shifts to personal, attitudinal, and behavioral characteristics.

**Status of Project:** The final report was submitted in February 1967.

**Highlights of Findings:**

1. Slightly more than one-fifth of the men hired for white-collar jobs in Milwaukee County in 1961 and 1962 had backgrounds that included at least a year of blue-collar experience.

2. Many of the respondents in firms outside the construction industry considered foremen as white-collar workers.

3. A major portion of the shifts into white-collar work were made within the same firm. However, the study indicates that there are wide variations among employers' policies, reflecting differing views of blue-collar workers as a source for filling white-collar jobs.

4. An analysis of blue- to white-collar shifts revealed four path stereotypes: (a) Shifts made possible primarily by short-term schooling taken in preparation for a white-collar job; (b) shifts made possible because of relatively formal, extended training for a blue-collar job which, in turn, provided the primary basis for a subsequent shift to white-collar work; (c) shifts achieved through experience acquired as a blue-collar worker; and (d) shifts based primarily on the employer's estimation of a blue-collar worker's potential. The first two paths, each involving education and training requirements above the norm, were found to be the principal routes to professional and technical occupations. Blue-collar experience was the most important path to managerial and foreman occupations, while employee potential without regard to any specific blue-collar skill was more important in achieving clerical and sales positions.

**Contract No.: 81-08-23**

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

**Principal Staff:** Mrs. Mary Dublin Keyserling.

**Project Title:** Employment Opportunities for Women in Subprofessional Occupations

**Objectives and Procedures:** Subprofessional occupations which offer employment opportunities for women are to be studied. Attention will focus on the growing number of technician occupations, as well as on such jobs as teacher aides, social worker aides, and library assistants, which require 2 or more years of education beyond high school. The study will furnish information on educational and skill requirements, job duties, and earnings.

**Status of Project:** Completion is scheduled for fall 1967.

**Contract No.: 81-08-22**

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

**Principal Staff:** Mrs. Mary Dublin Keyserling.

**Project Title:** Women Workers: Their Special Training Needs

**Objectives and Procedures:** This project explores the major problems faced by women in the labor force. Emphasis is to be placed on economically disadvantaged groups and on those with special problems. One group in the latter category will be women who enter the labor force, leave to become housewives, and later reenter the labor force. These women often need special counseling and guidance service as well as refresher or retraining courses. The project's report will contain a summary section highlighting implications for policy action.

**Status of Project:** Completion is scheduled for fall 1967.

**Contract No.: 81-08-08**

**Contractor:** Women's Bureau<sup>7</sup>  
U.S. Department of Labor  
Washington, D.C.

**Principal Staff:** Mrs. Mary Dublin Keyserling.

**Project Title:** National Survey of Child-Care Arrangements of Working Mothers

**Objectives and Procedures:** By means of questions on the *Current Population Survey* for February 1965, the project is securing details on types of child-care arrangements and how they vary in cost relative to the age group served, as well as information on family income and education.

**Status of Project:** A preliminary report, issued jointly by the Children's Bureau and the Women's

<sup>7</sup> This project is being conducted jointly with the Children's Bureau, U.S. Department of Health, Education, and Welfare.

Bureau, was prepared for the National Conference on Day-Care Services in May 1965. A bulletin based on the survey being prepared jointly by the Children's Bureau and Women's Bureau is expected to be available by late 1967.

**Highlights of Findings:** More than 6 million mothers who had at least one child under 14 living at home worked 27 weeks or more in 1964, either full or part time. These mothers had one-fifth of all U.S. children under 14. The proportion of mothers who were working was related to the age of children in the family; the older the children, the more likelihood the mother would be working.

Most of the mothers—86 percent—were working for economic reasons; some because of absolute need, and others for a particular need, such as setting aside money for their children's education.

Almost half of these children—47 percent—were cared for in their own homes, usually by their father or another relative. Fifteen percent were cared for in homes other than their own, half of these in homes of people not related to them; 13 percent by their own mothers while working; and 2 percent in day-care centers, nursery schools, and similar facilities. Another 15 percent had mothers who worked only during school hours. The balance—8 percent—were expected to care for themselves.

## PART 2.

### INSTITUTIONAL GRANTS ACTIVE IN FISCAL YEAR 1967

Seven colleges and universities are initiating long-range research programs in the manpower field through grants received during fiscal year 1966. Their programs are summarized in this section.

**Grant No.: 91-11-66-60**

**Institution:** Atlanta University  
Atlanta, Georgia

**Principal Staff:** Dr. Tilman C. Cothran, Dr. Huey Charlton, Dr. Harding B. Young.

**Major School or Dept.:** School of Business Administration, School of Education, Department of Sociology, Counseling and Guidance Offices

**Research Activities:** Manpower problems in the Atlanta area are being examined through projects of the interdisciplinary faculty research team and thesis research by graduate students. Major studies initiated since the grant was awarded in June 1966 include an evaluation of the area's vocational school curriculum, an assessment of high school students' perceptions of local occupational and educational opportunities, and an analysis of the employment experience of a sample of Atlanta vocational technical school graduates. Much of the planned research will give special attention to the employment problems of Negroes.

**Developmental Activities:** In developing its program to train master's degree candidates for careers in manpower, the University has added a series of manpower seminars to the curriculum and awarded fellowships to eight graduate students. Three manpower specialists have joined the faculty to work with the students and pursue research projects of their own. An advisory council of representatives from Atlanta colleges and universities, public schools, and independent agencies has been established to identify local manpower problems which might be investigated by the program's research team. At a conference held at the University in the spring of 1967, community leaders discussed the local manpower situation and received information on grant program goals and activities. A series of meetings planned for the summer of 1967 is bringing high school and college teachers to the campus to observe the manpower research program in action and to discuss research needs, manpower policies, and the development of research talent in the manpower field.

**Grant No.: 91-17-66-61**

**Institution:** Iowa State University  
Ames, Iowa

**Principal Staff:** Dr. Edward B. Jakubauskas.

**Major School or Dept.:** Industrial Relations Center

**Research Activities:** The University's manpower research center, established with an institutional grant award in June 1966, is working to raise the manpower research potential of colleges and universities in the six-State Great Plains Region. Social scientists from all disciplines concerned with human resources and manpower development will take part in a cooperative, regional effort to provide a flow of information to local, State, and Federal action agencies and to close the current gap between research and the implementation of action programs. Research activity has begun on several projects within four broad study areas: health manpower; job vacancy surveys; farm labor; and managerial manpower.

**Developmental Activities:** Manpower specialists are being trained through the master's degree program in industrial relations and through existing M.S. and Ph. D. programs in economics, sociology, and psychology. Last year, six research assistantships were awarded on a competitive basis to graduates of colleges and universities in the region, and two new courses in manpower economics were added to the curriculum. Thirty college professors and research specialists in the social sciences were selected to participate in a week-long summer workshop covering new research methods, current manpower research needs, developments in manpower policy, and other topics relevant to manpower in their respective disciplines. The nondegree workshop, which is designed to promote manpower research on smaller campuses as well as to update the skills of the region's social scientists, was held on the Iowa State University campus in June and will be repeated in 1968. To encourage an interchange of ideas between university research personnel and decisionmakers in action agencies, the University and the Iowa State Manpower

Development Council cosponsored a 2-day conference on human resources development last fall. A central clearinghouse for the exchange of information on published and ongoing manpower research relating to the six States was established at the center early in 1967.

**Grant No.: 91-21-66-63**

**Institution:** University of Maine  
Orono, Maine

**Principal Staff:** Dr. David H. Clark, Dr. Roderick A. Forsgren, Stephen L. Finner, Dr. William F. Stone.

**Major School or Dept.:** Departments of Economics, Business Management, Sociology, and Psychology

**Research Activities:** An interdisciplinary group of faculty members and graduate students is examining the barriers to full utilization of manpower in several regional economies in the State of Maine. Work began on the program at the start of the 1966 academic year and, during the first semester, involved review of relevant literature; exploration of the concepts of work, motivation, and underutilization; completion of a study of migration patterns to, from, and within the State; and formulation of tentative hypotheses and identification of problem areas which were investigated through small pilot projects the second semester. Pilot studies included the development of an inventory of data on the training, skills, and individual potential of populations in selected areas of Maine; supplementary research on the migration study analyzing the motivations of migrants vs. non-migrants and determining the net effects of selective migration on the quality of the labor force; a cost-benefit analysis of the Work-Experience Program; the measurement of occupational information among high school seniors from low-income families, relating this to type of community; and measuring management attitudes toward training programs. An underutilization index is being developed to relate jobs to individual potential; differences in motivation as a function of regional economic development are being investigated as well as differences in motivation among groups differing in level of job achievement.

**Developmental Activities:** Project members have established liaison with other research groups, public

officials, and individuals concerned with the State's manpower problems and have contacted representatives of management and labor and public officials in the State to let them know about the program. Meetings were held in several communities to acquaint the team with local variations in manpower development and manpower problems. Participants in the meetings, representing local management, labor, schools, and government, discussed the area's manpower situation, possible pockets of underutilized workers, local industry training programs, the education and aspirations of young people, and occupational counseling in the high schools.

Eleven graduate students were enrolled in the two-semester, interdisciplinary manpower research seminar, which was initiated as part of the grant project in the fall of 1966.

**Grant No.: 91-35-66-65**

**Institution:** North Carolina State University  
Raleigh, North Carolina

**Principal Staff:** Robert M. Fearn, Dr. William Toussaint.

**Major School or Dept.:** Department of Economics

**Research Activities:** Direct support is being provided for four studies now in process: the development of a framework for examining the lifetime allocation of work, income, and leisure; an econometric analysis of school and labor force participation among teenagers; an analysis of the role of human skill differentials in international trade patterns; and a project on racial differences in job search patterns. Indirect grant aid has supported research on the relationship between vocational education and occupational change and on Negro employment in North Carolina textile industries. Future studies will examine job market behavior of professionals and technicians, the costs and benefits of retraining workers of different age groups and different skill levels, and the economic effects of social welfare programs.

**Developmental Activities:** The Research Workshop in Labor Economics and Human Resources Development is now operating to provide informal student-faculty interchange on prospective dissertation topics and technical research problems. The workshop also serves as a medium for prepublication re-

view of other contract and personal research conducted by graduate students and faculty members, and as a forum for visiting speakers. Several new graduate courses in manpower economics are being planned, and the first of these, the University's Seminar in Human Capital Theory, will be offered starting in the fall of 1967.

**Grant No.: 91-38-66-64**

**Institution:** Oklahoma State University  
Stillwater, Oklahoma

**Principal Staff:** Dr. Paul Braden, Dr. Solomon Suter, Dr. Nicholas Pollis, Dr. Robert Sandmeyer, Dr. Larkin Warner, and Dr. John C. Shearer, program director.

**Major School or Dept.:** Departments of Industrial Education, Sociology, Psychology, and Economics

**Research Activities:** Both faculty and graduate students are examining various aspects of the problem of labor force nonparticipation in the Ozarks low-income area. Other studies in process include an evaluation of vocational training for American Indians administered through the Muskogee, Okla., office of the Bureau of Indian Affairs; an analysis of the civilian work force at nearby Tinker Air Force Base; and a major study of technical-vocational education beyond the high school level in Oklahoma.

**Developmental Activities:** The Manpower Research and Training Center, comprised of faculty members from the four departments, administers a program to promote manpower research and to train manpower specialists in a 2-year program leading to an M.S. degree. Three students from each department received fellowships last fall and are pursuing the special interdisciplinary curriculum designed for them. They participated in ongoing research projects during the academic year and will be closely involved in special work on research projects during the summer. The current set of fellows will complete their program in the summer of 1968. Recruitment of a new group of fellows for the fall of 1968 will be undertaken during the 1967-68 academic year.

**Grant No.: 91-40-66-62**

**Institution:** Temple University  
Philadelphia, Pennsylvania

**Principal Staff:** Dr. Louis T. Harms.

**Major School or Dept.:** Department of Economics, School of Business Administration, together with the College of Liberal Arts and College of Education

**Research Activities:** Since the grant was initiated last summer, faculty members have been promoting and participating in cooperative research efforts as well as pursuing manpower studies of their own. They are one of several groups contributing to a long-term study of Pennsylvania County labor force and employment projections, and are providing material on the demand for workers in selected service occupations for a project by the Center for Community Services and on county job projections for the Philadelphia school system. Other projects deal with: the development of a model for tracing the manpower implications of grants-in-aid in other areas; manpower implications of area development; manpower projections; capital-labor ratios of public utility companies; income distribution and poverty; unionization in the performing arts and among teachers; and analysis of social security and medicare.

**Developmental Activities:** The University now offers 15 graduate courses in the field of manpower studies, and new faculty members and students have been attracted into the program. The faculty has met with groups outside the University which are interested in studying different aspects of the problems of manpower supply and utilization. Participants in Temple's program anticipate the eventual development of an areawide research structure to investigate major manpower problems through a pooling of their resources with those of other universities; Federal, State, and local organizations; and business firms and industries. Additions have been made to the faculty, and five assistantships have been awarded to students working for their Ph. D. in economics and manpower.

**Grant No.: 91-49-66-66**

**Institution:** Virginia State College at Norfolk  
Norfolk, Virginia



**Principal Staff:** Dr. J. H. Gadson, Jr., Dr. James A. Bowser, Dr. Frank T. Cherry, Dr. Valmore R. Goines, Dr. John D. Holmes, Herbert A. Marshall.

**Major School or Dept.:** Departments of Business Administration, Industrial Education, Economics, Psychology, and Sociology

**Research Activities:** The Norfolk State Manpower Research Institute, an interdisciplinary research group established to carry out the goals of the grant program, has devoted most of its research effort during the first year to planning studies of specific manpower problems of the Tidewater Virginia communities. Data are being gathered on the area's manpower situation, and a research design and procedures are

being developed so that the team can pinpoint areas of labor force underutilization and select problems for pilot and intensive studies to be carried out starting in the fall of 1967.

**Developmental Activities:** The team has held several conferences with local representatives of governmental agencies, industries, and educational institutions who are either engaged in manpower research or concerned with manpower problems. Undergraduates in the social sciences are being selected to participate in the research activities of the group, and new courses related to manpower utilization will be added to the curriculum. Circulation of a periodic newsletter began in February.

## PART 3.

### GRANTS FOR DOCTORAL DISSERTATIONS ACTIVE IN FISCAL YEAR 1967

This section describes the grant-supported research of Ph. D. candidates whose dissertations explore manpower issues.

**Grant No.: 91-04-66-70**

**Institution:** University of Arkansas  
Fayetteville, Arkansas

**Doctoral Candidate:** Earl Wright, College of Business Administration.

**Sponsor:** Dr. John M. Peterson.

**Dissertation:** Industrial Recruiting Experience in Small City Job Markets

**Objectives and Procedures:** This study will determine sources of labor available to new manufacturing firms in small cities in rural regions and the impact of new plants on recruiting practices and labor supply of other employers in the area.

Managers and employers of new industries will be interviewed to obtain information on skill level, mobility of workers, and sources of labor. Other employers in the area will be questioned to determine the effect of new plants on labor supply conditions.

**Estimated Completion Date:** Fall 1967.

**Grant No.: 91-23-66-59**

**Institution:** Brandeis University  
Waltham, Massachusetts

**Doctoral Candidate:** Jane Gaudette Jones, The Florence Heller Graduate School for Advanced Studies in Social Welfare and Heller Research Center.

**Sponsor:** Dr. Stephen J. Miller.

**Dissertation:** The Career Patterns of Women Physicians

**Objectives and Procedures:** The study will be concerned with identifying the factors which motivate women to enter the medical profession and the barriers which they must overcome in the pursuit of their goal.

A sample of women students, dropouts, and graduates of the medical schools of Boston University, Tufts University, and Harvard University will be interviewed about career decisions and about personal and professional career patterns. Key persons in medical education will also be interviewed, in order to delineate the role of women in medicine in the future.

**Estimated Completion Date:** June 1968.

**Grant No.: 91-05-68-05**

**Institution:** University of California at Berkeley  
Berkeley, California

**Doctoral Candidate:** Ivan H. Light, Department of Sociology.

**Sponsor:** Dr. Martin A. Trow.

**Dissertation:** Self-Employment and Education as Avenues of Social Mobility for Chinese, Japanese, and Negroes in Urban Areas

**Objectives and Procedures:** This is a comparative and historical examination of the roles of business proprietorship and of education in the social mobility of three nonwhite groups: Chinese, Japanese, and Negroes. The researcher will determine rates of mobility through self-employment and through education for each group at different historical points. The causes and consequences of the predominance of proprietorship or of education as a means of social ascent will be considered in view of the present difficulties faced by each group.

The study will be limited primarily to members of the three minority groups in the San Francisco Bay area. Historical research, using library sources and public records, will be supplemented by interviews with Chinese, Japanese, and Negro leaders in the area.

**Estimated Completion Date:** July 1968.

**Grant No.: 91-05-68-04**

**Institution:** University of California at Berkeley  
Institute of Industrial Relations  
Berkeley, California

**Doctoral Candidate:** John S. Spier, Department of Sociology.

**Sponsor:** Dr. Robert Blauner.

**Dissertation:** Racial Integration in the Railroad Operating Crafts

**Objectives and Procedures:** Conditions which cause Negroes to succeed or fail in a given employment situation will be examined in this study. Railroad operating crafts in the San Francisco Bay area, virtually closed to nonwhites until about 5 years ago, will provide the work setting for exploring the sorts of problems Negroes can expect to face when a previously all-white industry is opened to them.

The researcher will attempt to interview the approximately 75 Negroes who have been hired in the railroad operating crafts in the San Francisco Bay area over the past 5 years (whether still employed or not). These interviews will cover job history and aspirations, education, family background, and reasons for leaving the railroad (where applicable). Comparative data will be collected from 25 white employees in the craft, who will be queried in addition concerning their views of Negroes as coworkers and whether their attitudes have changed since the preintegration period. Additional material is being provided through interviews with local union and company officials.

**Estimated Completion Date:** January 1969.

**Grant No.: 91-05-66-09**

**Institution:** University of California at Los Angeles  
Los Angeles, California

**Doctoral Candidate:** Robert Singleton, Department of Economics.

**Sponsor:** Dr. Jack Hirshleifer.

**Dissertation:** Labor Force Composition and the Minimum Wage

54

**Objectives and Procedures:** The proposition that an increase in the minimum wage causes unemployment among disadvantaged workers will be tested.

Data from the U.S. Department of Labor and the Social Security Administration will be analyzed to determine ability of employers to find alternatives to wage increases, such as early retirement or discharge of marginal workers.

**Estimated Completion Date:** March 1968.

**Grant No.: 91-15-66-21**

**Institution:** University of Chicago  
Chicago, Illinois

**Doctoral Candidate:** Frank H. Maier, Department of Economics.

**Sponsor:** Dr. T. W. Schultz.

**Dissertation:** An Economic Analysis of Adoption of Mechanical Cotton Harvesters

**Objectives and Procedures:** The objectives are to determine the changes in the use of farm labor following the adoption of mechanical cotton harvesters, the factors underlying the increasing use of mechanical cotton harvesters, the causes of the irregular pace of adoption of this labor-saving device among areas and over time, and the likely extent of further mechanization of cotton harvesting.

Profitability of use of the mechanical cotton harvester will be ascertained by obtaining and analyzing data on supply and cost of farm labor in comparison to cost of mechanical harvesting. Further mechanization will be estimated on the basis of findings.

**Estimated Completion Date:** Late 1967.

**Grant No.: 91-34-66-31**

**Institution:** Columbia University  
New York, New York

**Doctoral Candidate:** Myron D. Fottler, Graduate School of Business.

**Sponsor:** Dr. James W. Kuhn.

**Dissertation:** Training of Nonprofessional Manpower in New York City Hospitals

**Objectives and Procedures:** The study will evaluate training needs and training effectiveness of non-professional hospital workers, who account for most of the employment in the medical services industry. The emphasis will be on those occupations for which the MDTA has trained the greatest number nationally—practical nurse, nurse aide, and orderly.

Training needs will be determined by examining the relationships among wage rates, necessary skills, sources of manpower supply, and occupational shortages. The evaluation of training effectiveness will be approached through cost-benefit analysis.

**Estimated Completion Date:** Late 1967.

**Grant No.:** 91-34-66-37

**Institution:** Columbia University  
New York, New York

**Doctoral Candidate:** Harold Oaklander, Graduate School of Business.

**Sponsor:** Ivar Berg.

**Dissertation:** Some Unanticipated Effects of Advanced Education on a Critical Manpower Resource, the Inservice Teacher

**Objectives and Procedures:** The primary objective is to show the relationship between level of education and work satisfaction of inservice public school teachers. The assumption of educational policy concerning certification requirements and salary schedules is that advanced education for all public school teachers is automatically beneficial. The author wishes to test the validity of this assumption by obtaining information about the effects of the requirements for graduate education upon the turnover rate of teachers.

**Estimated Completion Date:** Fall 1967.

**Grant No.:** 91-34-66-58

**Institution:** Columbia University  
New York, New York

**Doctoral Candidate:** Hirsch S. Ruchlin, Department of Economics.

**Sponsor:** Dr. Aaron W. Warner.

**Dissertation:** Manpower Resources of the U.S. Offshore Maritime Industry

**Objectives and Procedures:** The study seeks to determine the size and the skill composition of the maritime labor force. This information should provide industry and Government officials with a tool to stabilize the labor force or structure it to meet longrun demand. Results will also shed light on factors contributing to either "surpluses" or "shortages" of workers.

Union and Government officials and seamen will be interviewed to determine factors motivating men to enter or leave the industry. Mechanisms for enlarging or diminishing the labor pool as demand fluctuates will be evaluated.

**Estimated Completion Date:** June 1968.

**Grant No.:** 91-34-67-44

**Institution:** Columbia University  
New York, New York

**Doctoral Candidate:** Thomas F. Wilson, Department of Economics.

**Sponsor:** Dr. Arthur F. Burns.

**Dissertation:** Labor Force Participation and Business Fluctuations: An Analysis by Cyclical Stages

**Objectives and Procedures:** This investigation will explore some aspects of the cyclical behavior of the labor force in order to provide information not now available from most usual types of regression analyses of labor force participation and business fluctuations. The behavior of the labor force during the postwar decades as a whole, and for cyclical stages in particular, will be analyzed. Using household and establishment data for the years 1948-1966, and total hours worked as the indicator of tightness in the job market, deviations of the labor force participation rate from trend will be calculated and analyzed for stages of expansion and contraction.

**Estimated Completion Date:** Mid-1968.

**Grant No.: 91-34-66-47**

**Institution:** Cornell University  
Ithaca, New York

**Doctoral Candidate:** Robert B. Richardson, New York State School of Industrial and Labor Relations.

**Sponsor:** Dr. Felician F. Foltman.

**Dissertation:** An Examination of the Transferability of Military Occupational Skills to the Civilian Labor Force

**Objectives and Procedures:** The purpose of this study is to determine how the technical, professional, and managerial skills necessary for planning modern military strategy are used in civilian occupations.

A group of approximately 5,000 officers and enlisted personnel who were recently separated from the Air Force will form the study population. Mail questionnaires augmented by selected interviews will provide data for statistical analysis.

**Estimated Completion Date:** Summer 1967.

**Grant No.: 91-36-67-23**

**Institution:** Fordham University  
The Bronx, New York

**Doctoral Candidate:** Mary B. Harmeling, Department of Sociology and Anthropology.

**Sponsor:** Rev. Joseph P. Fitzpatrick.

**Dissertation:** The Role of Social and Cultural Links in the Urban Occupational Adjustment of Southern Appalachian Migrants

**Objectives and Procedures:** This study is concerned with the accommodation of Southern Appalachian migrants to urban society. The experiences of migrants when they first reached the city 1 to 2 years ago will be examined and compared with their present situations to determine what degrees of stability they have achieved with regard to occupation, housing, and personal and family adjustment. Profiles of the migrants will be compiled and ranked by relative adjustment to the various aspects of their new environment.

Between 50 and 100 families from depressed, underdeveloped counties in eastern Kentucky who have recently moved into Kenton County, Ky., the nearest highly industrialized metropolitan area, will comprise the study population. Family histories of migration will be reconstructed through personal interviews.

**Estimated Completion Date:** Late 1967.

**Grant No.: 91-23-66-15**

**Institution:** Harvard University  
Cambridge, Massachusetts

**Doctoral Candidate:** Richard B. Freeman, Department of Economics.

**Sponsor:** Dr. John T. Dunlop.

**Dissertation:** An Economic Analysis of Scientific and Engineering Manpower

**Objectives and Procedures:** The objective of this study is to obtain information about economic determinants in the job market for scientific and engineering manpower.

Statistical techniques will be used to relate income data to information on the number of advanced degrees conferred in order to determine the importance of economic factors in attracting students to these professions. Students in the Boston area will be surveyed to find what explicit information they have about job opportunities and earnings in different fields. A mathematical model of the professional and technical job market will be developed and tested with relevant data.

**Estimated Completion Date:** Late 1967.

**Grant No.: 91-23-67-42**

**Institution:** Harvard University  
Cambridge, Massachusetts

**Doctoral Candidate:** Alexander Korns, Department of Economics.

**Sponsor:** Dr. John T. Dunlop.

**Dissertation:** The Effects of Unemployment and Inflation on Income Distribution in the United States

**Objectives and Procedures:** This study will investigate patterns of inflation and unemployment, and will provide empirical data designed to assist policy decisions in this field. Data from various sources, including the Federal Government, will be used.

**Estimated Completion Date:** June 1968.

**Grant No.:** 91-23-66-16

**Institution:** Harvard University  
Cambridge, Massachusetts

**Doctoral Candidate:** Llad Phillips, Department of Economics.

**Sponsor:** Dr. John T. Dunlop.

**Dissertation:** Dynamics of Labor Turnover in U.S. Industry

**Objectives and Procedures:** This study seeks to identify the variables affecting the size, variability, and timing of labor turnover in manufacturing and mining industries.

Regression analysis will be used to ascertain the significant economic variables determining the magnitude and seasonal and cyclical variation of types of labor turnover. A mathematical model of labor turnover rates for a particular industry will be constructed, and the results will be compared with actual turnover rates.

**Estimated Completion Date:** Late 1967.

**Grant No.:** 91-23-67-08

**Institution:** Harvard University  
Cambridge, Massachusetts

**Doctoral Candidate:** Daniel Quinn Mills, Department of Economics.

**Sponsor:** Dr. John T. Dunlop.

**Dissertation:** Factors Determining Patterns of Employment and Unemployment in the Construction Industry

**Objectives and Procedures:** This study will attempt to explain why the construction industry, which continually reports serious labor shortages, also suffers the second highest annual unemployment rate reported by national industries. The flow of workers in and out of employment and the industry, both on a short- and long-term basis, will be analyzed, taking into consideration frictional unemployment, the impact of seasonality, and barriers to worker mobility. Based on the findings, proposals will be made for the collection of additional data on the industry and for public policy to deal with major problems of the industry.

Utilizing data from the Bureau of Labor Statistics, the Social Security Administration's continuous history sample, the U.S. Weather Bureau, the U.S. Bureau of the Census, and private sources, a model of employment flows in the construction industry will be constructed and principal equations estimated.

**Estimated Completion Date:** January 1968.

**Grant No.:** 91-15-66-52

**Institution:** University of Illinois  
Urbana, Illinois

**Doctoral Candidate:** Edward W. Haurek, Department of Sociology.

**Sponsor:** Dr. Joseph R. Gusfield.

**Dissertation:** Sociological Determinants of College Aspiration, College Curriculum Choice, and Occupational Aspiration Among Working Class Adolescents

**Objectives and Procedures:** The objective of this study is to test the hypothesis that the environment of working class adolescents causes them to differ from middle-class children in value placed on a college education and in the choice of an occupation.

Data from Project TALENT will be used to compare values and characteristics of middle-class and working-class adolescents. Statistical techniques will be utilized in comparison of aspirations, achievements, aptitudes, relationships with fellow students, degree of

parental supervision, occupational choices, and motivations for college attendance.

**Estimated Completion Date:** Fall 1967.

**Grant No.:** 91-17-67-09

**Institution:** The University of Iowa  
Iowa City, Iowa

**Doctoral Candidate:** Theodore E. Newman, Department of Economics.

**Sponsor:** Dr. B. L. Barnes.

**Dissertation:** The Effectiveness of Wage Rates in Attracting and Repelling People to Offer Labor Service

**Objectives and Procedures:** This study will seek to evaluate the effectiveness of wage rate differentials in allocating labor services. Results are expected to provide a clearer understanding of the labor force's response to wage differentials and a basis for the development of more effective labor allocation programs.

The researcher will analyze wage level patterns among and within manufacturing industries.

**Estimated Completion Date:** March 1968.

**Grant No.:** 91-22-67-04

**Institution:** University of Maryland  
College Park, Maryland

**Doctoral Candidate:** Rev. William J. Byron, Department of Economics.

**Sponsor:** Dr. Paul A. Weinstein.

**Dissertation:** The Applicability of the Job-Bank Concept to the Washington, D.C., Market for Female Household Workers

**Objectives and Procedures:** This study is concerned with the unskilled and unemployed workers who, though capable of performing a service, are unable to establish contact with potential employers. Job banks have been suggested as one possible remedy

for the employment problems of the unskilled. A job bank is a firm which hires a pool of unemployed workers and acts as their manager in contacting potential employers; provides bonding, uniforms, transportation to the job, and basic fringe benefits; and pays regular wages from earnings collected directly from the employers. This study will determine whether the job-bank concept is applicable to a specific occupational and geographic market (domestic workers in the Washington, D.C., metropolitan area) and whether such a firm could operate at a profit while improving the organization of the market for unskilled labor.

Complaints of shortages from the demand side of the market will be examined to test the hypothesis that the job market is failing buyers and sellers of female household labor. Wage data and nonprice measures of shortage, such as a decline in the quality of labor hired and more intensive use of available help, will be collected from several sources: (1) A review of each application and job order for household workers submitted to the Washington, D.C., office of the U.S. Employment Service during the month of October 1966, (2) an interview with all applicants for domestic service jobs during the month, and (3) mail questionnaires for employers. Other information will be obtained through interviews with managers of temporary help service agencies and of fee-charging agencies dealing with low-skill occupations.

**Estimated Completion Date:** Fall 1968.

**Grant No.:** 91-23-66-36

**Institution:** Massachusetts Institute of Technology  
Cambridge, Massachusetts

**Doctoral Candidate:** Malcolm S. Cohen, Department of Economics.

**Sponsor:** Dr. Edwin Kuh.

**Dissertation:** The Determinants of the Relative Unemployment of Skilled and Unskilled Workers

**Objectives and Procedures:** This study determined the effect of wages, technical change, and other variables on the relative employment of skilled and unskilled workers in order that policymakers may better understand why unskilled workers have a higher unemployment rate than skilled workers.



Regression analysis was used to determine the amount of variation in employment that can be accounted for by the above factors.

**Completed.**

**Grant No.: 91-24-67-21**

**Institution:** The University of Michigan  
Ann Arbor, Michigan

**Doctoral Candidate:** Dorothy M. Herberg, Department of Sociology.

**Sponsor:** Dr. Louis A. Ferman.

**Dissertation:** The Career Patterns of Female Social Workers

**Objectives and Procedures:** Career patterns for women with professional social work training will be developed from information on the employment and the extent of underutilization of these women; the retraining or skill improvement they might need to reenter the profession; and the determinants of their career decisions.

Comprehensive mail questionnaires will be sent to a potential sample of 3,000 women who received master's degrees in social work from 1956 through 1960. They will be asked to provide data on background, education, current socioeconomic status, marital and family facts, professional practice and other employment experience, and general career attitudes. These data will be analyzed to provide typologies of career patterns and to explain variations among them.

**Estimated Completion Date:** April 1968.

**Grant No.: 91-24-68-07**

**Institution:** The University of Michigan  
Ann Arbor, Michigan

**Doctoral Candidate:** Jeffry Piker, Department of Sociology.

**Sponsor:** Dr. Louis A. Ferman.

**Dissertation:** Community Organization, Race, and Entry Into the Work Force

**Objectives and Procedures:** This is an investigation of patterns of access to entry-level jobs and the effect of race, community organization, and other variables on such patterns. Analysis of the linkage between the community and its job economy should provide a better understanding of the forces which create and sustain racial inequality in employment. A theoretical framework will be developed to test appropriate hypotheses regarding the effects of community organization on jobseeking behavior and the effects of race on work force entry.

Findings will be based on an analysis of data collected between 1962 and 1964 by the Chicago Youth Development project under a grant from the Ford Foundation. These data were drawn from a random sample of 1,260 boys aged 10 to 19 years, 300 mothers, and 200 community leaders in four southwest Chicago neighborhoods, each of which is a high-poverty, high-delinquency area, with an identity stemming from natural boundaries and subcultures. Qualitative knowledge and insights gained in firsthand investigation will supplement the analysis of the data.

**Estimated Completion Date:** Fall 1968.

**Grant No.: 91-24-66-22**

**Institution:** The University of Michigan  
Ann Arbor, Michigan

**Doctoral Candidate:** James A. Sweet, Department of Sociology.

**Sponsor:** Dr. Otis Dudley Duncan.

**Dissertation:** Family Composition and the Labor Force Participation of Married Women

**Objectives and Procedures:** This study will examine the influence of family composition on the labor force activities of married women in the United States. The presence of children in the household and their ages will be the major variables studied. Other factors, including characteristics of the women, e.g., their age, race, education, place of origin, and characteristics of their husbands and families, e.g., husband's income and employment status, will be utilized

as controls, and interactions between them and household composition variables will be examined.

Data from the U.S. Bureau of the Census, largely from the 1/1000 sample tape from the *1960 Census of Population*, will be used. Multivariate statistical methods will be employed for analysis.

**Estimated Completion Date:** Fall 1967.

**Grant No.: 91-24-68-01**

**Institution:** Michigan State University  
East Lansing, Michigan

**Doctoral Candidate:** John D. Mason, Department of Economics.

**Sponsor:** Dr. Jack Stieber.

**Dissertation:** The Aftermath of the Bracero: A Study of the Economic Impact on the Agricultural Hired Labor Market of Michigan from the Termination of Public Law 78

**Objectives and Procedures:** Three years have elapsed since the expiration of the agreement with Mexico allowing bracero labor to be brought into the United States to fill seasonal needs for farmworkers. This research will appraise the longrun impact of and adjustment to termination of the agreement in Michigan's agricultural economy. The decision of Congress not to renew the agreement will be evaluated in terms of how well it has fulfilled its goals of boosting wages, absorbing unemployment, and enhancing working conditions among domestic hired farmworkers. Examination of the current labor demand-supply situation in the Michigan farm industry should help to resolve the question of the relationship between agricultural wage levels and the supply of domestic farmworkers.

About 1,000 returns are expected from questionnaires sent to a sample of 4,000 fruit and vegetable farmers with annual sales over \$20,000.

The questionnaire will request data on wages, hours, income, capital substitution, and small vs. large farm trends. Further data will be collected from relevant public and private records and through interviews with farmers, laborers, bankers, and processors in 20 to 25 geographic subsectors.

**Estimated Completion Date:** June 1968.

**Grant No.: 91-24-66-44**

**Institution:** Michigan State University  
East Lansing, Michigan

**Doctoral Candidate:** John Pease, Department of Sociology.

**Sponsor:** Dr. William H. Form.

**Dissertation:** Economic Mobility in an Affluent Community

**Objectives and Procedures:** The major objectives of this study are to describe and analyze the sources of economic mobility and immobility in an affluent community and to specify the factors which result in its transmission from one generation to the next.

Spending units in Lansing, Mich., a relatively affluent community in which 81 percent of the families earn more than \$4,000 annually, will be interviewed in order to find the relationship between the income level of one generation and the next.

**Estimated Completion Date:** Early 1968.

**Grant No.: 91-24-66-45**

**Institution:** Michigan State University  
East Lansing, Michigan

**Doctoral Candidate:** Joan H. Rytina, Department of Sociology.

**Sponsor:** Dr. William H. Form.

**Dissertation:** The Effect of Economic Position on Perception of Economic Opportunities

**Objectives and Procedures:** The major objective of this study is to assess the extent to which the poor perceive economic mobility as a real possibility. The hypothesis is that belief in economic opportunity is rooted in perception of others in a similar position who have actually moved up.

Interviews will determine the economic class position of family heads in order to test the relationship between this factor and the head's belief about equality of opportunity in America.

**Estimated Completion Date:** Late 1967.

**Grant No.: 91-24-67-03**

**Institution:** Michigan State University  
East Lansing, Michigan

**Doctoral Candidate:** Jon M. Shepard, Department of Sociology.

**Sponsor:** Dr. William H. Form.

**Dissertation:** The Impact of Automated Technology on Occupational Specialization

**Objectives and Procedures:** The thesis of this study is that in an organization undergoing automation, employee reaction will vary by category of worker and by degree and nature of technological development. Blue-collar workers will be observed in automated, mechanized, and nonmechanized work settings and rated by degree of job satisfaction. Results of the study are expected to have bearing on questions related to the training and recruitment of workers in the occupations studied.

Data will be collected through interview and observation of employees in the three different technological settings and through company documents and discussion with company officials.

**Estimated Completion Date:** January 1968.

**Grant No.: 91-24-67-01**

**Institution:** Michigan State University  
East Lansing, Michigan

**Doctoral Candidate:** Lawrence E. Sneden, Department of Sociology.

**Sponsor:** Dr. F. B. Waisanen.

**Dissertation:** Factors Involved in Upward Social Mobility From the Culture of Poverty

**Objectives and Procedures:** The influence of selected variables upon the development of attitudes conducive to eventual escape from poverty will be measured in this study. Age, sex, marital status, and the amount of social contact young people from low-income families have with the larger society are the variables that will be tested. The study is expected to provide an outline of the conditions requisite both to

the development of occupational aspirations and the acceptance and pursuit of manpower training programs.

At least 600 individuals 15 to 27 years of age will be interviewed in a random household sample of the two census tracts having the lowest median family incomes in Lansing, Mich. Through the use of questionnaires, data will be collected and analyzed on the demographic characteristics of the young people, their perceptions of opportunity for and desirability of upward social mobility, and the nature and degree of contact they have outside their own culture.

**Estimated Completion Date:** December 1967.

**Grant No.: 91-24-66-43**

**Institution:** Michigan State University  
East Lansing, Michigan

**Doctoral Candidate:** Worth C. Summers, Department of Sociology.

**Sponsor:** Dr. William A. Faunce.

**Dissertation:** The Impact of Work Organization on Commitment to and Participation in a Scientific Discipline

**Objectives and Procedures:** An attempt was made to determine how and to what degree the distribution of scientists in compatible and incompatible organizational situations changes professional participation and commitment in the field of microbiology.

Questionnaires mailed to members of the American Society for Microbiology were used to determine the effect of work settings upon their commitment to and participation in their discipline.

**Estimated Completion Date:** Fall 1967.

**Grant No.: 91-34-67-46**

**Institution:** The New School for Social Research  
New York, New York

**Doctoral Candidate:** Thomas H. Shey, Department of Sociology.

**Sponsor:** Dr. Deborah Offenbacher.

**Dissertation:** The Effects of Prior Work Experience on the Professional Socialization of Social Work Students

**Objectives and Procedures:** This study will investigate attitudes and motivation of students in graduate social work training. It will seek to determine whether it is preferable to encourage these students to pursue graduate study immediately following completion of undergraduate work, or to encourage them to acquire some professional experience in the field before entering graduate school. Questionnaires will be administered to 400 students in the New York University Graduate School of Social Work and to 100 students from one or more other graduate schools of social work in the New York metropolitan area. Participating students will also be observed and interviewed informally. Students with and without previous social work experience will be contrasted regarding: (1) Perception of themselves at various stages of training; (2) immediate and long-range career goals; and (3) understanding of what will be expected of them as professional social workers. Data will be grouped to allow for consideration of other variables affecting students' attitudes and motivation, including degree of training and social work indoctrination received, type of work background, age and sex.

**Estimated Completion Date:** June 1968.

**Grant No.:** 91-34-66-18

**Institution:** New York University  
New York, New York

**Doctoral Candidate:** Warren Mintz, Department of Sociology.

**Sponsor:** Dr. Sidney Aronson.

**Dissertation:** A Study of Variables Involved in the Successful Adaptation of Agricultural Migrant Families

**Objectives and Procedures:** This study is designed to uncover mechanisms which successful migrant families use to keep themselves well organized and immune from the disrupting conditions that one would ordinarily expect for people in such circumstances.

The investigator will stay with migrant families as a member of their work unit in order to collect data on the intrafamily relationships and on the relation of the family to the social and economic communities in which it finds work.

**Estimated Completion Date:** June 1968.

**Grant No.:** 91-37-66-13

**Institution:** Ohio State University Research Foundation  
Columbus, Ohio

**Doctoral Candidate:** L. Emil Kreider, Department of Economics.

**Sponsor:** Dr. Herbert S. Parnes.

**Dissertation:** Development and Utilization of Managerial Talent: A Labor Market Study of Managers in Manufacturing Establishments

**Objectives and Procedures:** This study will provide hypotheses on job market experience, mobility patterns, and training of managers.

Managers in Columbus, Ohio will be questioned about work experience and educational development.

**Estimated Completion Date:** March 1968.

**Grant No.:** 91-37-66-40

**Institution:** Ohio State University Research Foundation  
Columbus, Ohio

**Doctoral Candidate:** Paul B. Miller, Department of Economics.

**Sponsor:** Dr. Glenn W. Miller.

**Dissertation:** An Analysis of Government Training Programs in Ohio

**Objectives and Procedures:** This study is designed to augment currently available data on work experience of MDTA course graduates in Ohio.

Records of both graduates who have found employ-

ment and those who are still unemployed will be analyzed to determine if there are important differences among trainees in personal and work experience which affect their methods, ability, and willingness to adapt to the world of work.

**Estimated Completion Date:** August 1967.

**Grant No.:** 91-38-67-14

**Institution:** Oklahoma State University  
Stillwater, Oklahoma

**Doctoral Candidate:** Paul R. Blume, Department of Economics.

**Sponsors:** Dr. Robert L. Sandmeyer, Dr. Larkin Warner.

**Dissertation:** An Evaluation of Institutional Vocational Training Received by American Indians Through the Muskogee, Okla., Area Office of the Bureau of Indian Affairs

**Objectives and Procedures:** This study will evaluate the effectiveness of the institutional vocational training provided by the Federal Government to American Indians in terms of the degree of economic independence attained following training.

Data obtained from the Muskogee Area Office of Indian Affairs on employment, earnings, and public welfare assistance for the pretraining and posttraining periods will provide the basis for the evaluation. Findings will be used to develop manpower-training policy recommendations for Indians.

**Estimated Completion Date:** February 1968.

**Grant No.:** 91-38-66-50

**Institution:** Oklahoma State University of Agriculture and Applied Science Research Foundation  
Stillwater, Oklahoma

**Doctoral Candidate:** Gerald E. Boggs, Department of Education.

**Sponsor:** Dr. Harry K. Brobst.

**Dissertation:** A Comparative Analysis of the Impact of Various Types of Curricula on the Vocational Success of School Dropouts

**Objectives and Procedures:** This study compared the vocational success of school dropouts who received training in various types of curriculums in MDTA programs with school dropouts who received little or no training.

Measures of vocational success as indicated by wages, number of jobs held, days unemployed, job performance, and job satisfaction were obtained for jobs held 1 year after training in the MDTA program.

**Completed.**

**Grant No.:** 91-38-66-12

**Institution:** Oklahoma State University of Agriculture and Applied Science Research Foundation  
Stillwater, Oklahoma

**Doctoral Candidate:** Gaylen R. Wallace, Department of Education.

**Sponsor:** Dr. Victor O. Hornbostel.

**Dissertation:** An Analysis of Job Satisfaction of Employed Youth Involved in an Experimental School Dropout Rehabilitation Program in Oklahoma City

**Objectives and Procedures:** This study examined differences in job satisfaction among employed youth receiving vocational training, academic training, or a combination of both in a school dropout rehabilitation program. Adjustments were made for variables pertaining to certain work situations and personal characteristics.

Youth who completed the program as well as those who were not enrolled or who dropped out well before completion were tested and interviewed to determine job satisfaction. Multivariate analyses, including regression analysis and covariance analysis, were used to evaluate the data.

**Completed.**

**Grant No.: 91-40-67-51**

**Institution:** University of Pennsylvania  
Philadelphia, Pennsylvania

**Doctoral Candidate:** Moshe Sicron, Graduate  
Group in Demography.

**Sponsor:** Dr. John D. Durand.

**Dissertation:** Interrelationship Between Educational  
Level and Occupational Structure of the Labor Force  
—An International Comparison

**Objectives and Procedures:** This project will compare levels of educational attainment by occupation in several countries, then use these relationships to measure the adequacy of current methods of educational planning for manpower needs. Chief emphasis will be on international variations in the educational levels of workers in professional, technical, and managerial occupations. Differences will be correlated with the degree of development in the country, changes in per-man output of the country as of the industry, income differentials, the minimum educational requirements for each occupation (where such requirements prevail), and the influence on income of the level of education and the occupation pursued.

Occupational data from censuses taken around 1960 by the several countries will be assembled. Data cross-classified by education and, where available, by age, sex, region, income, and other variables, will also be sought. Adjustment will be made for differences in methods of classification among the countries.

**Estimated Completion Date:** July 1968.

**Grant No.: 91-32-66-20**

**Institution:** Princeton University  
Princeton, New Jersey

**Doctoral Candidate:** Stanley W. Huff, Department  
of Economics.

**Sponsor:** Dr. Frederick H. Harbison.

**Dissertation:** Hiring Practices, Hiring Standards,  
and Manpower Development Policies of Selected Employing  
Institutions in Labor Markets With Differing  
Rates of Unemployment

**Objectives and Procedures:** This project will study the differences in wages of comparable occupations and the recruiting policies of employers between the adjacent job markets of Steubenville, Ohio-Weirton, W. Va., which has a low rate of unemployment, and Wheeling, W. Va., where the rate of unemployment is above the national average.

Personnel managers of firms in both areas will be interviewed to determine differences in hiring policies.

**Estimated Completion Date:** Fall 1967.

**Grant No.: 91-16-67-13**

**Institution:** Purdue University  
Lafayette, Indiana

**Doctoral Candidate:** Darrell R. Benjamin, Department  
of Counseling and Guidance.

**Sponsor:** Dr. William K. LeBold.

**Dissertation:** A 30-Year Longitudinal Study of Engineering  
Interest Profiles and Career Patterns

**Objectives and Procedures:** This is an inquiry into the reasons for the stability of personal interests throughout a career. The education, interests, and career patterns of a number of Purdue University engineering graduates will be examined to test whether individual interests, as measured early in college and compared with those of persons working in various occupations, provide an adequate basis for predicting the future occupations of students. Results will reveal whether individuals seek a vocation which allows expression of interests existing during college, or whether individuals, as a result of their work experiences, become very much like others in the same occupation.

Purdue engineering alumni who were administered the Strong Vocational Interest Blank in 1935 will be retested through mail questionnaires and the resulting data will be synthesized with data from the Purdue Engineering and Science Alumni Survey. The relationships between interests and career patterns will be measured over a 30-year period.

**Estimated Completion Date:** January 1968.

**Grant No.: 91-05-66-24**

**Institution:** Stanford University  
Stanford, California

**Doctoral Candidate:** Paul D. Gayer, Department of Economics.

**Sponsor:** Dr. Melvin W. Reder.

**Dissertation:** Manpower Effects of Cuban Immigrant Flows, 1959-66

**Objectives and Procedures:** The study will assess the mechanisms by which the U.S. economy as a whole and the job market of the Miami area adjusted to the inflow of political refugees from Cuba.

Actions of Federal, State, and local authorities to cope with inflows of refugees will be appraised. A competitive model for the Miami job market will be constructed, and results compared with actual conditions in the job market.

**Estimated Completion Date:** June 1968.

**Grant No.: 91-34-67-54**

**Institution:** Syracuse University  
Syracuse, New York

**Doctoral Candidate:** John W. Pelosi, Rehabilitation Counselor, Training Program.

**Sponsor:** Dr. Julius S. Cohen.

**Dissertation:** A Study of the Effects of Examiner Race, Sex, and Warmth on Test Responses of Negro Examinees

**Objectives and Procedures:** This research is concerned with how subjects in a testing situation are affected by an examiner's race, sex, and manner of behavior toward them. Groups of male Negro subjects will be tested by Negro and white examiners; male and female examiners; examiners who treat them in a warm, friendly manner and others who act brusque and disinterested; and examiners with various combinations of these characteristics. The influence of these characteristics will be judged by analyzing variance in the subject's test scores.

Ten subjects will be examined under each of the

eight combinations of the variables. The eight treatment combinations will be randomly assigned to 80 subjects selected randomly from a population of male Negro enrollees in an MDTA training program in Syracuse, New York. Four examiners will be selected from a group of advanced graduate students at the University, trained in the administration of tests, and instructed in the techniques of assuming the "warm" and "cold" examiner roles. Several tests representing a variety of stimulus materials will be used to determine which types, if any, seem more susceptible to examiner influence. Further analysis using various multiple comparison techniques will be used to pinpoint specific significant influences.

**Estimated Completion Date:** January 1968.

**Grant No.: 91-34-68-03**

**Institution:** Syracuse University  
Syracuse, New York

**Doctoral Candidate:** Bernard Daniel Rostker, Department of Economics.

**Sponsor:** Dr. Jerry Miner.

**Dissertation:** The Theory of Manpower Requirements and Occupational Retraining and the Determinants of MDTA Training Success

**Objectives and Procedures:** In this study, labor requirements concepts found in several theoretical production models will be applied to occupational training, and the results used as a basis for identifying and evaluating the elements of a successful MDTA training program. Program elements to be examined as determinants of success include demographic characteristics and educational background of trainees, local environment (i.e., neighborhood characteristics as reported in the census tract and block reports), local employment conditions, characteristics of instructors, and course content and costs (i.e., method of instruction, the capital/student ratio, the student/teacher ratio, funds spent in various activities). The relative success of a program will be measured in terms of the proportion of enrollees who complete training, wage and employment differentials before and after training, and the internal efficiency of the program itself (i.e., the effective use of scarce resources to produce trained workers). Training and

course records will be analyzed for MDTA programs (completed or active) which have been authorized as of June 30, 1965, in the Syracuse, N.Y., area. This sample includes 868 trainees in 19 occupational re-training programs.

**Estimated Completion Date:** August 1968.

**Grant No.:** 91-46-67-47

**Institution:** Texas Technological College  
Lubbock, Texas

**Doctoral Candidate:** G. Frank Lawlis, Department of Psychology.

**Sponsors:** Dr. Beatrix Cobb, Dr. Arthur Sweney.

**Dissertation:** Motivational Aspects of the Chronically Unemployed

**Objectives and Procedures:** A typical behavior pattern of the chronically unemployed—working at a job for a few days, then quitting for no apparent reason—will be examined in this study. The motivations, personality traits, and self-concepts of a group of chronically unemployed men will be compared with those of a group of matched, employed males. An attempt will be made to determine whether the chronically unemployed are motivated to work but unable to find satisfactory outlets, or whether their goals are so different from those of the rest of society that they are unwilling to participate in today's job economy.

A sample of 150 subjects—75 chronically unemployed men referred by the Texas Employment Commission, and 75 employed men whose age, educational level, race, intelligence, and geographical area match those of the unemployed group—will be included in this study. Data for the group of unemployed men will be collected through standard tests to gauge literacy, motivation, and personality traits. The control group will be selected from a group of employees who have already taken the same tests, and will be matched with the unemployed group on the basis of relevant data in their personnel files.

**Estimated Completion Date:** January 1968.

**Grant No.:** 91-27-67-15

**Institution:** Washington University  
St. Louis, Missouri

**Doctoral Candidate:** Robert A. Ullrich, Graduate School of Business Administration.

**Sponsor:** Dr. Sterling H. Schoen.

**Dissertation:** A Study of the Motivating and Dissatisfying Forces in Isolated Work Situations

**Objectives and Procedures:** This research will test the hypothesis that while worker motivation and productivity are influenced by several compensatory aspects of a job, the importance of these compensations varies significantly in different work environments. Those who work in an environment relatively isolated from the rest of society will rely on their job to fulfill needs that other workers fulfill largely outside their work. The maritime industry, which is representative of an isolated work situation, and which has a high rate of labor turnover, possibly indicative of prevalent job dissatisfaction, is the focus of this study. The relationship of the maritime worker to his co-workers and supervisors will be examined in order to develop specific managerial practices to decrease labor turnover and stimulate motivation and productivity in this type of work situation.

The reactions of marine officers to their work situation will be studied both through questionnaire interviews in port and observation during a sea voyage. The material collected will be analyzed with respect to the nature of the events which took place, how they were perceived by the worker, the attitudes they generated in the worker, the length of time these attitudes lasted, and the worker's behavior resulting from his attitudes.

**Estimated Completion Date:** July 1968.

**Grant No.:** 91-51-66-54

**Institution:** University of Washington  
Seattle, Washington

**Doctoral Candidate:** Stephen E. Baldwin, Department of Economics.



**Sponsor:** Dr. J. B. Gillingham.

**Dissertation:** Impact of Governmental Programs on Employment of Youth in the Seattle Labor Market

**Objectives and Procedures:** This study will analyze job market entry and experience of disadvantaged Seattle teenagers during the current period of exceptionally rapid regional economic expansion. It will also assess the effectiveness of various public agencies and special programs designed to facilitate the assimilation of this group into the labor force.

Youth will be interviewed about their job market experience. Standard analytical techniques will be used to relate data to factors relevant to success, including age, sex, race, family characteristics, and education. Particular effort will be made to determine the relative job effectiveness of youth who participated in training programs of various public agencies.

**Estimated Completion Date:** Early 1968.

**Grant No.:** 91-24-66-14

**Institution:** Wayne State University  
Detroit, Michigan

**Doctoral Candidate:** Stig Ralstrom, Department of Industrial Education.

**Sponsor:** Dr. G. Harold Silvius.

**Dissertation:** Teaching Practices for Preventing Dropouts

**Objectives and Procedures:** The objective of this study is to determine the most effective teaching practices that instructors of industrial education can use to prevent school dropouts.

Research studies, ratings by experts, and statistical studies of school records will be used to determine the most effective practices for preventing school dropouts.

**Estimated Completion Date:** March 1968.

**Grant No.:** 91-53-66-11

**Institution:** University of Wisconsin  
Madison, Wisconsin

**Doctoral Candidate:** James S. Crabtree, Department of Industrial Relations.

**Sponsor:** Dr. Alan Filley.

**Dissertation:** The Structure of Related Instruction in Wisconsin Apprenticeship Programs

**Objectives and Procedures:** The objective of this study is to develop a current description of apprenticeship programs of related instruction in Wisconsin schools of vocational education. The structure will provide a framework for evaluating this kind of educational process in the light of present and future skilled manpower expectations and needs in the State.

Information will be collected from the Apprenticeship Division, the State Board of Vocational and Adult Education, and the local vocational schools by questionnaire, interview, and review of historical records. Data will be analyzed and presented in both narrative and tabular form.

**Estimated Completion Date:** Fall 1967.

**Grant No.:** 91-53-67-17

**Institution:** University of Wisconsin  
Madison, Wisconsin

**Doctoral Candidate:** Marilyn Joyce DePoy, Department of Economics.

**Sponsor:** Dr. Gerald G. Somers.

**Dissertation:** A Study of Women in the MDTA Vocational Training Program in the State of Wisconsin

**Objectives and Procedures:** This study will determine the differences between female and male trainees in Manpower Development and Training Act programs in Wisconsin with respect to personal

characteristics, types of jobs for which they trained, their success in completing programs, and posttraining experiences in the labor force. An attempt will be made to account for these differences and to evaluate their significance in fulfilling the purposes of the act.

A detailed, comparative profile of female and male trainees will be compiled from records of 8,500 Wisconsin trainees. The records, other available job market data, questionnaire responses, and, if required, additional questionnaires will be used in studying the occupations for which women are training and to follow up the subsequent success of the trainees.

**Estimated Completion Date:** January 1968.

**Grant No.:** 91-53-66-68

**Institution:** University of Wisconsin  
Madison, Wisconsin

**Doctoral Candidate:** Leonard J. Hausman, Department of Economics.

**Sponsor:** Dr. Gerald G. Somers.

**Dissertation:** Using Monetary Incentives to Motivate and Stabilize the Employment of Welfare Recipients

**Objectives and Procedures:** The objectives of this study were to determine the significance of the use of financial incentives in motivating welfare recipients to seek employment and to evaluate alternative incentive plans.

The number of employable persons who can earn more by welfare payments than by working were determined, and alternative incentive systems were devised.

**Completed.**

**Grant No.:** 91-53-66-69

**Institution:** University of Wisconsin  
Madison, Wisconsin

**Doctoral Candidate:** Walter Hubner, Industrial Relations Research Institute.

**Sponsor:** Dr. Alan Filley.

**Dissertation:** Individual Need Satisfaction in Work and Nonwork

**Objectives and Procedures:** This study will explore the motivations of workers, the satisfactions that workers desire from work as well as nonwork, the nature of the strategies that individuals use in approaching work, and the manner in which technology affects jobs and job occupants.

A forced-choice questionnaire will be administered to a sample of skilled and unskilled blue-collar workers. The questionnaire will measure the degree to which psychological needs are satisfied by working.

**Estimated Completion Date:** June 1968.

**Grant No.:** 91-53-66-10

**Institution:** University of Wisconsin  
Madison, Wisconsin

**Doctoral Candidate:** Collette Moser, Department of Economics.

**Sponsor:** Dr. Gerald G. Somers.

**Dissertation:** An Evaluation of Area Skill Surveys as a Basis for Manpower Policies

**Objectives and Procedures:** The objective of this study is to evaluate Area Skill Surveys and Training Needs Surveys. These surveys are conducted in cooperation with public employment agencies in order to predict occupational needs for 2 to 5 years.

The content and methodology of the present surveys will be appraised, and accuracy of predictions will be measured by a followup study. Officials will be interviewed to determine the requirements of a successful survey and the extent to which surveys are utilized by employers and vocational program planners.

**Estimated Completion Date:** Fall 1967.

**Grant No.:** 91-53-67-20

**Institution:** University of Wisconsin  
Madison, Wisconsin

**Doctoral Candidate:** Arie Shirom, Industrial Relations Research Institute.

**Sponsor:** Dr. Jack Barbash.

**Dissertation:** Joint Labor-Management Committees on Technological Change in the Midwest: A Comparative Study of Their Labor Market and Organizational Correlates

**Objectives and Procedures:** This study will explore the role of joint labor-management committees in dealing with the effects of technological innovation at the plant level. These joint committees, established as a permanent facet of plant operations, advise manufacturers and union officials on the introduction of and adjustment to changes in the plants' production systems and on employee development and utilization. Research findings will describe the activities and relative success of joint committees in plants of more than 250 employees in seven midwestern States.

Data will be collected through questionnaire surveys and interviews involving members of 75 to 100 joint committees in the area and a proportionate sample of union and company officials and personnel managers in Wisconsin. Data on the nature, scope, and history of the committees' activities will be collected.

**Estimated Completion Date:** May 1968.

**Grant No.:** 91-53-66-26

**Institution:** University of Wisconsin  
Madison, Wisconsin

**Doctoral Candidate:** Wilbur J. Smith, Department of Economics.

**Sponsor:** Dr. Harold Groves.

**Dissertation:** The Cost and Benefits of Unemployment, Retraining, and Relocation in an Economically Depressed Area: A Case Study of Five Counties in West Virginia

**Objectives and Procedures:** This study will measure the cost and benefits of retraining the unemployed in terms of how well course offerings met the needs of the local job market, increased the occupational and geographical mobility, improved employment and

earnings, and increased the working life of trainees. It will also determine the effect of recently instituted retraining programs on the amount and kind of social welfare payments.

Research will utilize data from interviews, from social security files, and from analysis of cost of retraining programs and welfare programs. Detailed statistical analysis and correlations of these data will be made.

**Estimated Completion Date:** January 1968.

**Grant No.:** 91-53-66-27

**Institution:** University of Wisconsin  
Madison, Wisconsin

**Doctoral Candidate:** Jack H. Snyder, Industrial Relations Research Institute.

**Sponsor:** Dr. Gerald G. Somers.

**Dissertation:** Personal and Behavioral Factors Affecting the Supply of the Self-Employed

**Objectives and Procedures:** The objectives of this study are to uncover the personal and behavioral factors governing the supply of self-employed, to compare owner-managers with hired managers, and to forecast on the basis of personal factors the supply of owner-managers in retail and service industries.

Survey data will be compiled by interviewing and testing a sample of owner-managers in Madison, Wis. A representative group of hired managers will be selected for comparison. Statistical methods will be used to evaluate the data.

**Estimated Completion Date:** Fall 1967.

**Grant No.:** 91-07-66-19

**Institution:** Yale University  
New Haven, Connecticut

**Doctoral Candidate:** Robert Goldfarb, Department of Economics.

**Sponsor:** Dr. Mark W. Leiserson.

**Dissertation:** A Benefit Cost Study of New Haven's Work-Training Programs

**Objectives and Procedures:** This study will measure the relative effectiveness, in terms of income improvement, of various work-training programs in New Haven.

Comparable measures of benefits and costs for each program will be developed based on data to be collected from Community Progress, Inc., on the expense of programs and income of participants after training.

**Estimated Completion Date:** Fall 1968.

**Grant No.:** 91-07-67-38

**Institution:** Yale University  
New Haven, Connecticut

**Candidate:** Barbara Holtz Kehrer, Department of Economics.

**Sponsor:** Dr. Mark W. Leiserson.

**Dissertation:** Demand and Supply Under Conditions of Shortage: A Study of the Nursing Profession

**Objectives and Procedures:** This study will evaluate the Nurse Training Act of 1964, which sought to increase the supply of nurses through lowering the costs and extending the availability of a nursing education. The extent to which this approach can be expected to alleviate shortages in a labor supply-demand situation will be assessed.

The researcher will concentrate on hospital demand

for registered nurses in Connecticut. A series of interviews will be held with the administrators of the State's 35 short-term general hospitals. Wage and employment data for all hospital employees are being provided by the Connecticut Hospital Association.

**Estimated Completion Date:** July 1968.

**Grant No.:** 91-07-66-06

**Institution:** Yale University  
New Haven, Connecticut

**Doctoral Candidate:** Daniel C. Rogers, Department of Economics.

**Sponsor:** Dr. Neil W. Chamberlain.

**Dissertation:** The Effect of Education on Income

**Objectives and Procedures:** The objective of this study is to determine the increase in lifetime income which is due to additional education, as distinct from intelligence or a combination of other determinants.

Students of Connecticut junior high schools and certain private schools in 1934 and 1935 who were given intelligence tests will be traced and queried about education, work experience, background, social status, and income. From this information, a multiple regression will be run using income as the dependent variable.

**Estimated Completion Date:** Indefinite, pending return of candidate from an assignment with the Rockefeller Foundation.

**PART 4.**

**GRANTS FOR RESEARCH PROJECTS ACTIVE  
IN FISCAL YEAR 1967**

This section describes the grant-supported projects of specialists in a variety of disciplines who are examining key questions related to manpower.

**Grant No.: 91-09-66-25**

**Institution:** The American University  
Washington, D.C.

**Principal Staff:** Dr. Charles A. Dailey, School of  
Business Administration.

**Project Title:** Use of Programed Case Technique  
for Increasing Job Opportunities

**Objectives and Procedures:** The general objective  
of this project was to provide a means of expanding  
job opportunities for workers who come from ethnic  
groups which traditionally have been disadvantaged.

The study approached the problem of minimizing  
discrimination in personnel administration by teach-  
ing executives to appraise employees as individuals.  
The expected product of the study was a design for  
a laboratory training program which will teach key  
personnel to estimate career potential. To lessen the  
administrator's dependence on tests and oversimplified  
impressions, in-depth case studies will be introduced as  
tools for appraising the capabilities of an employee.  
Appraisals were validated against performance.

**Completed.**

**Grant No.: 91-03-66-39**

**Institution:** University of Arizona  
Tucson, Arizona

**Principal Staff:** Dr. Trevor Bain, College of Busi-  
ness and Public Administration.

**Project Title:** The Impact of Defense Contract Ter-  
mination on the Labor Force

**Objectives and Procedures:** This project was con-  
cerned with the ability of current manpower programs  
to meet the needs of workers displaced by defense con-  
tract cancellations. Findings were based on case stud-  
ies of the reemployment experiences of personnel laid  
off by the Hughes Company plant in Tucson during

cancellation of the mobile missile program. The  
Hughes work force had been recruited nationally and  
integrated into the relatively isolated city of Tucson,  
whose largest manufacturing firm is the Hughes plant.  
The area presented few comparable occupational  
choices for defense-oriented production, technical, and  
professional personnel. The extent to which manpower  
programs were adaptable to this atypical situation  
were determined through statistical analysis of ques-  
tionnaire and interview data which had already been  
collected from a sample of the 2,300 employees whose  
jobs were terminated between 1963 and 1966.

**Completed.**

**Grant No.: 91-37-66-71**

**Institution:** Bowling Green State University  
Bowling Green, Ohio

**Principal Staff:** Dr. Robert M. Guion, Department  
of Psychology.

**Project Title:** The Meaning of Work and Its Rela-  
tion to the Development of the Motivation to Work

**Objectives and Procedures:** This study will at-  
tempt to determine what meaning work has for the  
individual leaving school to begin his career, the de-  
velopment of his concept of work, and how it influ-  
ences his motivation during early employment experi-  
ence. Engineering and factory personnel to be hired  
from colleges and high schools will be identified by  
several companies participating in the project. On the  
basis of extensive preemployment testing, the subject  
will be classified as "task-oriented," "socially-oriented,"  
or "self-oriented" when he begins his new job. The  
group with which he starts work will be classified as  
"work oriented" or "not work oriented." The rela-  
tionship between meaning of work and motivation, as-  
sessed by coworker ratings, will be studied independ-  
ently for each classification.

**Estimated Completion Date:** June 1968.

**Grant No.: 91-09-66-33**

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

**Principal Staff:** Dr. Louise Ann Johnson, Dr. Leonard Goodman.

**Project Title:** Enrollment, Termination, and Program Outcomes of Neighborhood Youth Corps Youth as Related to Their Economic Needs—A Planning Study

**Objectives and Procedures:** This study identified the major components of the cost of maintaining Neighborhood Youth Corps enrollees both in school and out of school; identified some of the dimensions along which these cost components might be expected to vary; developed a model within which enrollees' financial requirements were determined by family budget, income, and standard of living; designed and pretested survey instruments; and designed a field survey.

A literature review supplemented interviews with personnel in Washington agencies participating in the Neighborhood Youth Corps program. An inventory of cost components was compiled and translated into an appropriate questionnaire format for each category of respondents. A multistage sampling design was worked out to provide for the selection of the categories of the informants.

**Completed.**

**Grant No.: 91-05-67-60**

**Institution:** University of California at Berkeley  
Berkeley, California

**Principal Staff:** Dr. Lloyd Ulman, Director, Institute of Industrial Relations.

**Project Title:** Employment Agencies and School Placement Services in a Large Metropolitan Labor Market Area

**Objectives and Procedures:** This exploratory project will lay the groundwork for a major field survey to develop data on (1) characteristics of the various types of employment agencies and placement services in the San Francisco Bay area; (2) the

relationships of public and private employment agencies with educational administrators and counselors; and (3) the adequacy of information relating to occupational changes and job opportunities collected and disseminated by public and private Employment Services. These data will be used to determine how increased national emphasis on manpower programs has affected the role of employment and placement services, and whether interaction between employment agencies and educational institutions is contributing to the optimum development, flow, and application of information on occupational demand and supply.

This exploratory study will develop a survey entailing personal interviews with staff members from a sample of employment agencies, placement services, and educational institutions in the San Francisco Bay area.

**Estimated Completion Date:** July 1968.

**Grant No.: 91-05-67-61**

**Institution:** University of California at Berkeley  
Berkeley, California

**Principal Staff:** Dr. Lloyd Ulman, Director, Institute of Industrial Relations.

**Project Title:** A Study of Changing Skill Requirements in the Building Trades

**Objectives and Procedures:** This study will develop data on the utilization of carpenters in the homebuilding industry. These data will be used in (1) examining the demand side of homebuilding to assess changes in requirements for labor and materials; (2) examining the labor supply side of the industry to determine the range of carpentry skills currently practiced; (3) relating the demand and supply sides of the market in an appraisal of the Bay area's current problem of excess supply of carpentry manpower, and of the apparent discrepancy between apprenticeship program practices and actual manpower needs; and (4) developing a new technique for analyzing changes and projecting manpower needs in this sector of the economy.

Two sets of data are being developed, the first relating to changes on the demand side of the homebuilding industry and the second, to changes on the supply side. Estimates on changing demand for labor are being developed on the basis of data on the char-

acteristics of houses built in Alameda County in selected years from 1930 to 1965 by sampling building permits and permit applications. Labor requirements for the construction of houses in three price ranges are being estimated on the basis of data from estimator's handbooks, architects' records, and the files of the National Association of Homebuilders. The study of changes on the supply side will be based on a mail questionnaire survey of a sample of 4,000 carpenters in northern California.

**Estimated Completion Date:** July 1968.

**Grant No.:** 91-51-66-51

**Institution:** Central Washington State College  
Ellensburg, Washington

**Principal Staff:** Dr. Clayton C. Denman, Department of Anthropology.

**Project Title:** Ethnic Differences and Historical Changes in Manpower Resources of a Small Town

**Objectives and Procedures:** This study is concerned with a community which, deprived of its major sources of employment and beset by ethnic group division, is being bypassed by economic growth and development. Data collected through interviews with business owners, managers, and employees in Cle Elum, Wash., will provide a basis for an analysis of past and present ethnic traditions and employment patterns. This analysis is expected to give rise to suggestions for promoting employment opportunities for the town's citizens. More generally, the results may be useful in implementing future programs of manpower development in other economically stagnant communities in the United States.

**Estimated Completion Date:** Early 1968.

**Grant No.:** 91-34-67-58

**Institution:** Columbia University  
New York, New York

**Principal Staff:** Dr. Herbert Hyman, Chairman, Department of Sociology.

**Project Title:** Occupational Choice and Its Determinants Among Totally Blind Individuals

**Objectives and Procedures:** As part of a larger study of the patterns of communication, perception, and social behavior among the blind, this research will examine blindness as a barrier to gaining knowledge of environment, and consequently, to choosing a career. Its objective is to contrast patterns of occupational choice between blind Negroes and whites and between those blinded before the age of 15 years and those blinded later in life. The developmental processes underlying these patterns will be examined through a parallel study of totally blind children and their families. Results of the study are expected to have a bearing on specialized and practical problems of career choice for other handicapped groups.

The present analysis will use the following groups drawn from the larger sample of the total study: 180 white and 90 Negro adults, totally blind, living in northern cities; and 80 white and 20 Negro children, totally blind 10 to 15 years of age, living in New York City. In-depth interviews have been held with the adults, and a sighted family member was also interviewed concerning the blind person's immediate and larger environment and how he had been socialized or resocialized. Parallel interviews were conducted with the children; their mothers were questioned about the patterns of childrearing followed with the blind child and with his siblings; and sighted siblings were interviewed whenever available regarding their own development within the family and their orientation toward the blind child. Computer analysis will be used to trace individual and aggregate patterns of learning.

**Estimated Completion Date:** Fall 1967.

**Grant No.:** 91-34-66-41

**Institution:** Cornell University  
Ithaca, New York

**Principal Staff:** Dr. Leonard P. Adams, School of Industrial and Labor Relations; Dr. Olaf F. Larson, College of Agriculture.

**Project Title:** Case Studies of Viable Worker-Management Relationships on Farms in New York State

**Objectives and Procedures:** The primary purpose of this study was to determine viable farmer-worker



relationships. Investigation was conducted through interviews involving 15 to 20 farmers and their year-round workers, and 8 to 12 cases where the farmer was dependent upon seasonal workers. Examination of seasonal farm labor problems involved a study of the process of recruitment, of the role of the New York Employment Service, of the relationships between the farmer and workers, of labor camps and their operation, of the incentive system, of human relations questions, and of the economics of the farm enterprise.

Case study findings formed the basis for a discussion by a committee of faculty members from the School of Industrial and Labor Relations and the Agricultural College, which is attempting to develop constructive farm manpower policies and programs.

**Completed.**

**Grant No.: 91-34-66-49**

**Institution:** Cornell University  
Ithaca, New York

**Principal Staff:** Dr. William H. Friedland, New York State School of Industrial and Labor Relations.

**Project Title:** Migrant Labor as a Form of Intermittent Social Organization and as a Channel for Geographic Mobility

**Objectives and Procedures:** This was the first part of an extensive, long-term study of the theoretical and practical problems pertaining to seasonal farm labor in the eastern United States. It focused upon a single migrant labor camp during the summer of 1966. The researchers acted essentially as observers, maintaining diaries, observing the behavior and attitudes of migrants, management, crew leaders, and farmers, and collecting information through interviews. Subsequent contacts with migrants who remain in the North will provide more systematic data on adaptation problems.

**Completed.**

**Grant No.: 91-34-67-48**

**Institution:** Cornell University  
Ithaca, New York

**Principal Staff:** Dr. William H. Friedland, New York State School of Industrial and Labor Relations.

**Project Title:** Migrant Labor as a Form of Intermittent Social Organization

**Objectives and Procedures:** This research will extend and expand upon a 1-year pilot study previously conducted under grant no. 91-34-66-49. The present study is concerned with the problems inherent in the seasonal farm labor camps and crews on the eastern seaboard. Questions directly relevant to public policy will also be explored: Data collected on mobility and on the economic and demographic backgrounds of the migrants will be used to assess the living expenses, wage levels, and working conditions of those still in the migrant work force, and the social characteristics, job-finding experiences, and general adaptation of migrant dropouts who have settled in northern communities.

The population to be studied is confined to a sample of southern Negroes working in migrant labor camps in New York State, drawn randomly and stratified by location within the State, major crop, and size of farm. Students will be placed in the camps as laborers and researchers, working and living with the migrants while collecting data. A systematic study of a small random sample of the crews originally studied will also be conducted to determine the validity of the data gathered by the undergraduate researchers.

**Estimated Completion Date:** July 1968.

**Grant No.: 91-09-66-23**

**Institution:** The George Washington University  
Washington, D.C.

**Principal Staff:** Dr. John H. Norton, School of Government and Business Administration.

**Project Title:** Methods for Accuracy Analysis and Sensitivity Analysis for Projections of Area Labor Force, Employment, and Unemployment

**Objectives and Procedures:** The basic objective of this project is to extend and adapt current methods of accuracy and sensitivity analysis to manpower projections. Findings will demonstrate the applicability of

the methods to specific types of area labor force forecasts and employment and unemployment projections.

**Estimated Completion Date:** Fall 1967.

**Grant No.:** 91-11-66-46

**Institution:** University of Georgia  
Athens, Georgia

**Principal Staff:** Dr. Ethel Bengree Jones, Department of Economics.

**Project Title:** A Feasibility Study to Identify the Underemployed and to Examine the Labor Market Attachment of Labor Force Nonparticipants in a Low-Income Area

**Objectives and Procedures:** The objective was to design and test a household interview questionnaire which can be used by the Bureau of the Census to identify and measure underemployment. Also, a method of measuring the willingness to work of those who are not seeking employment because of lack of local opportunities was sought.

A questionnaire was designed and tested in household interviews in three counties of northeast Georgia in which the average income level is low.

**Completed.**

**Grant No.:** 91-23-68-06

**Institution:** Harvard University  
Cambridge, Massachusetts

**Principal Staff:** Dr. John T. Dunlop, Department of Political Economy.

**Project Title:** A Program and Policy Analysis of the 'Concentrated Employment Program'—Boston, Mass.

**Objectives and Procedures:** The federally supported Concentrated Employment Program, operated by Action for Boston Community Development, Inc., is an experimental manpower program designed to deal specifically with the employment problems of the urban poor. While the program is basically con-

cerned with the successful placement of workers, it is also generating important information about unemployment in the slums, employer reaction to various manpower programs, and the effectiveness of new techniques to facilitate the transition from unemployment to employment. This knowledge and experience, which would ordinarily be known only to operating personnel in local manpower programs, will be collected and documented by the researcher. Manpower problems and solutions common to all slum neighborhoods will be distinguished from those unique to Boston, and recommendations will be made concerning the possible application of successful techniques to programs in other cities.

Interviews will be held with the program's operating personnel and their supervisors; other subcontractors; the Massachusetts Division of Employment Security; other agencies and organizations collaborating in the program; and workers and employers participating in the program. Data collected on job opportunities, worker characteristics, work histories, training and education, and unemployment rates will be analyzed to identify significant socioeconomic variables to aid in evaluating the program.

**Estimated Completion Date:** October 1968.

**Grant No.:** 91-15-66-29

**Institution:** University of Illinois  
Champaign, Illinois

**Principal Staff:** Dr. Adolf Sturmthal, Institute of Labor and Industrial Relations.

**Project Title:** Forecasting Manpower Requirements on the Basis of Historical Data

**Objectives and Procedures:** This study is an experiment in the application of available forecasting techniques to actual historical data for a given industry. Historic statistical information available in 1945 will be used as a basis for projecting aggregate employment and occupational distribution of employment in the class I railroads industry up to the present. Forecasts will be compared with actual figures to test the validity of frequently used forecasting techniques.

**Estimated Completion Date:** December 1967.

**Grant No.: 91-16-66-32**

**Institution:** Indiana University Foundation  
Bloomington, Indiana

**Principal Staff:** Dr. C. L. Christenson and Dr. W. H. Andrews, Department of Economics and Division of Economic Research.

**Project Title:** A Study of Labor Force Adaptation to Technical Change in the Coal Industry

**Objectives and Procedures:** This study will analyze changing skill requirements and adjustment problems in an industry where rapid technological development has affected sizable segments of the labor force. The experience of the U.S. bituminous coal mining industry between 1956-65 will be examined to determine the relations of productivity and employment changes to such variables as geographic distribution of production, production in different types of mines, labor productivity, extent of total or partial unemployment, and degree of regional economic development in the areas involved. The adequacy of arrangements for retirement, transfer, and retraining of workers displaced during this period will be assessed. Research procedures will include statistical analysis of available data and the gathering of material through interviews at employment and training centers.

**Estimated Completion Date:** July 1968.

**Grant No.: 91-22-66-08**

**Institution:** University of Maryland  
College Park, Maryland

**Principal Staff:** Dr. Paul Wasserman and Dr. Mary Lee Bundy, School of Library and Information Services.

**Project Title:** Manpower Utilization and Requirements in Library and Information Services

**Objectives and Procedures:** This project developed a blueprint for a full-scale, coordinated investigation of manpower needs and manpower utilization in libraries and allied information services. After thorough analysis and review of relevant literature and preparation of background materials, manpower, social science, and library authorities participated in a 3-day

seminar to consider key manpower problems in the field of library services. Ideas and research avenues opened up during the seminar were incorporated into a detailed plan for further research which is expected to follow.

**Completed.**

**Grant No.: 91-22-68-02**

**Institution:** University of Maryland  
College Park, Maryland

**Principal Staff:** Dr. John W. Wysong and Dr. Ray A. Murray, Department of Agricultural Economics.

**Project Title:** The Impact of Changes in Farm Characteristics on the Rate of Release of Labor Resources From Farm Production Activities in Selected Types of Farming Areas in Maryland

**Objectives and Procedures:** The grant will give partial support to a larger project with the overall objective of providing guidelines for increasing manpower productivity and adjustment to economic and technological change in Maryland's agricultural economy.

The present study will cover three counties in western Maryland; subsequent research will involve rural areas in southern Maryland and on the Eastern Shore. Implications drawn from the data are expected to be applicable to other northeastern States.

The U.S. census of agriculture will be used for information on characteristics of labor resources released, by type of farm, for different areas of Maryland. Surveys and interviews of employees and employers on individual farms will be conducted. Data will also be collected on off-farm employment characteristics and opportunities and on the extent and feasibility of mechanizing different crop and livestock enterprises, particularly those using low-skill labor.

**Estimated Completion Date:** July 1968.

**Grant No.: 91-23-66-55**

**Institution:** University of Massachusetts  
Amherst, Massachusetts

**Principal Staff:** Dr. Everett Lee, Department of Sociology and Anthropology.

**Project Title:** Spatial Mobility and Manpower Development

**Objectives and Procedures:** This study will examine the implications for manpower development and training of migration to, from, and within the States of Pennsylvania and Mississippi. Census data will be used to determine the extent to which the two States are dependent upon manpower from other States, the extent to which the two States are developing manpower for other States, and the types of manpower migrating to and from the two States. Standard demographic techniques of analysis will be applied to the volume or rate of in- and out-migration for specific race-sex-education-age groups.

**Estimated Completion Date:** Fall 1967.

**Grant No.: 91-23-67-11**

**Institution:** Massachusetts Institute of Technology  
Boston, Massachusetts

**Principal Staff:** Frazier Kellogg, Sloan School of Management.

**Project Title:** Computer Based Matching Systems: An Exploration of the State of the Art and the Proposed Nationwide Matching System

**Objectives and Procedures:** This research has provided the groundwork for preliminary designs for a computer-based system to match men and jobs on a nationwide scale. Selected private companies, professional associations, and public institutions which are developing or are now operating their own matching systems have provided information and ideas to be used in constructing a national system.

A 2-day workshop was held in Cambridge, Mass., for 37 participants, including representatives of operating systems and experts in job market research and computer and information technology. Presentations and dialogue were transcribed, summarized, and evaluated.

**Completed.**

**Grant No.: 91-24-67-56**

**Institution:** The University of Michigan  
Ann Arbor, Michigan

**Principal Staff:** Dr. Louis A. Ferman, Institute of Labor and Industrial Relations.

**Project Title:** Study of the Correlates of Long-Term Unemployment

**Objectives and Procedures:** This study is concerned with the degree of influence exerted by age, education, literacy, and race on the prolongation of unemployment. Statistical technique will be used to isolate these interlocking variables and measure their relative contribution to long-term unemployment; to the occupational and geographical mobility of the long-term unemployed; and to the willingness and capacity of these workers to seek retraining as well as their capacity to score satisfactorily on vocational tests, and therefore qualify for a job or training program. Study findings will provide new background material for legislative planning to alleviate long-term unemployment.

Data assembled by the Michigan Employment Security Commission—responses from intensive interviews held in 1962 with 2,114 Detroit residents who had been unemployed 26 weeks or longer—have been made available to the researcher. Subsamples of the group were given vocational tests and counseling and followup interviews in 1964 and 1966, and additional data will be drawn from this source. Other demographic and ecological data associated with Detroit inner-city areas will be used to relate the characteristics of inner-city life to employment patterns of inner-city residents.

**Estimated Completion Date:** June 1968.

**Grant No.: 91-24-67-24**

**Institution:** The University of Michigan  
Ann Arbor, Michigan

**Principal Staff:** Dr. Jeffrey Piker, Institute of Labor and Industrial Relations.

**Project Title:** A Survey of Literature on Negroes' Access to Entry-Level Jobs

**Objectives and Procedures:** This project will organize existing information on the problem of Negroes' access to entry-level jobs, provide a conceptual framework for interpreting and applying this information, and suggest useful directions for future research. Information will be grouped into four fields: (1) Characteristics of entry-level jobs accessible to Negroes, (2) relevant characteristics of Negroes applying for entry-level jobs, (3) community background variables which affect work force entry, and (4) orientations of employers toward Negroes seeking entry-level jobs.

Arrangements will be made to use a variety of sources of published and unpublished materials, such as general library resources; specialized files available at the Institute; and materials from government agencies, labor organizations, and other institutes of labor and industrial relations. The information collected will be summarized, organized into report form, and evaluated to identify research gaps and future policy needs.

**Estimated Completion Date:** Fall 1967.

**Grant No.:** 91-24-66-03

**Institution:** University of Michigan—Wayne State University  
Ann Arbor, Michigan

**Principal Staff:** Dr. Louis A. Ferman, Institute of Labor and Industrial Relations.

**Project Title:** Community Organization and the Mobilization of Resources for Manpower Development Programs

**Objectives and Procedures:** The ultimate objective of this project was to test the feasibility of using various social and economic variables to predict local receptivity to Federal development programs and to determine the number and kinds of programs likely to be successful in a given community. The researcher approached the problem of community participation in Government programs by exploring several characteristics of community structure that accounted for variations in local receptivity to Federal programs.

Data were collected from the documents and official records of local and State agencies in all communities in the United States with populations of over 25,000. Multivariate analysis was used to relate the

variables to measures of community resource mobilization. Other appropriate statistical techniques were used in developing actuarial statements.

**Estimated Completion Date:** Fall 1967.

**Grant No.:** 91-24-67-05

**Institution:** University of Michigan—Wayne State University  
Ann Arbor, Michigan

**Principal Staff:** Dawn Day Wachtel, Institute of Labor and Industrial Relations.

**Project Title:** A Survey of Literature on the Working Poor

**Objectives and Procedures:** In previous studies of people living in poverty, primary emphasis has been on the unemployed, and on the retired or disabled—the nonworker. While research on the employment conditions and experiences of marginal workers has not been ignored, the existing body of information has been badly in need of synthesis and organization.

This project made a systematic arrangement of published and unpublished materials on the working poor. Pertinent studies and reports were identified, classified, synthesized, and evaluated. Orientation of the survey was based on five key questions: Who are the working poor? What are the low-income jobs? Why are there low-income jobs? Why do some people become and remain marginal workers? What are the policy implications suggested by the literature on the working poor? The report, which included suggestions for further research, was published as a monograph and widely distributed to manpower specialists involved in the development of programs of action and research to upgrade the employment potential and increase the economic security of the working poor.

**Completed.**

**Grant No.:** 91-24-66-30

**Institution:** Michigan State University  
East Lansing, Michigan

**Principal Staff:** Dr. Michael E. Borus, School of Labor and Industrial Relations.

**Project Title:** Research to Demonstrate the Uses of Unemployment Insurance Wage Reports

**Objectives and Procedures:** The goal of this project is to demonstrate that individual wage reports are potentially valuable as a source of information in the study of manpower problems. To illustrate the applicability of the wage reports to manpower research, three substudies will be made, using the reports as primary sources of data: (1) Post-retraining earnings and the unemployment experience of retrained workers will be examined to supplement and check the validity of information derived from present retraining follow-ups and to determine which groups profit most from retraining; (2) the costs and benefits of various vocational education programs will be compared; and (3) the accuracy of data obtained through personal interviews and mail questionnaires will be checked through a comparison with parallel information secured from the wage reports and Social Security records.

**Estimated Completion Date:** June 1968.

**Grant No.:** 91-24-66-42

**Institution:** Michigan State University  
East Lansing, Michigan

**Principal Staff:** Dr. James R. Hundley, Jr., Department of Sociology.

**Project Title:** A Study of Interpersonal Relationships Among Managers and Employees of Fruit and Vegetable Farms With Emphasis on Labor-Management Practices Utilized

**Objectives and Procedures:** This study will analyze labor-management relations in fruit and vegetable farms in Michigan. Managers of 100 farms, selected in a random area sample of the 10 major agricultural counties in Michigan, will be queried as to size of farm, commodities produced, and hiring practices. From this information, 25 to 30 farms will be selected to represent the various sizes and types of farming. Researchers will spend 1 week at each farm, observing the work environment during the day and administering structured and unstructured interviews to managers and workers in the evening.

**Estimated Completion Date:** December 1967.

**Grant No.:** 91-25-67-12

**Institution:** University of Minnesota  
Minneapolis, Minnesota

**Principal Staff:** Edward Gross, Departments of Sociology and Industrial Relations.

**Project Title:** Problems of Counseling Special Populations Pursuant to Government Manpower Programs

**Objectives and Procedures:** This study is concerned with the inadequacy of traditional methods in counseling minority group clients. Many counselors are unable to work effectively with those most in need of guidance because they have been taught to perform a few broadly defined core tasks in all counseling cases—regardless of the client, his background, or his special problems. The investigator will describe the distinctive counseling needs of clients from various minority groups and make recommendations for preparing counselors to meet these needs both on the job and in future training programs.

Administrators, counselors, clients, and representatives of clients' groups at Youth Opportunity Centers will be interviewed to determine problems presented by characteristics of clients, including such matters as their involvement in illegal activities and differences in the ethical concepts of the client and the counselor. This information will be used to formulate recommendations for possible changes in counseling practices.

**Estimated Completion Date:** Fall 1967.

**Grant No.:** 91-25-67-10

**Institution:** University of Minnesota  
Minneapolis, Minnesota

**Principal Staff:** Dr. Herbert C. Heneman, Jr. and Dr. George Seltzer, Industrial Relations Center.

**Project Title:** Manpower Planning and Forecasting in the Firm: An Exploratory Probe

**Objectives and Procedures:** This study will assess the extent and nature of manpower planning and forecasting in the firm, the techniques employed, and the corporate uses to which planning data are applied. The relevance of those variables used by firms in

forecasting their manpower requirements to methods of forecasting aggregate labor demand will be examined. Findings will provide hypotheses for possible further research into the problems of manpower planning and forecasting.

Data will be obtained by questionnaire and interview from a sample of firms in the Minneapolis-St. Paul metropolitan area. Corporate officers will be asked to explain their forecasting and the role of manpower planning in the decisionmaking process of the firm.

**Estimated Completion Date:** January 1968.

**Grant No.:** 91-27-66-02

**Institution:** University of Missouri  
Columbia, Missouri

**Principal Staff:** Dr. Rex R. Campbell, Department of Rural Sociology.

**Project Title:** Job Opportunities and Job Discrimination as Perceived by Adults of Low Socioeconomic Status

**Objectives and Procedures:** The first objective was to determine the attitudes and knowledge of disadvantaged Negroes and whites concerning job opportunities. The second objective was methodological. It determined the feasibility of obtaining objective research data from respondents when interviewers are of a different race from interviewees. Information had already been gathered through personal interviews with a random sample of 1,500 adults in low-income urban areas of Missouri. Regression analysis was based on the processed and tabulated data, using race and socioeconomic status as independent variables.

**Completed.**

**Grant No.:** 91-15-66-01

**Institution:** National Opinion Research Center  
Chicago, Illinois

**Principal Staff:** Dr. Richard Jaffe.

**Project Title:** College, Color, and Employment: Racial Differences in Postgraduate Employment Among 1964 Graduates of Louisiana Colleges

**Objectives and Procedures:** Information was obtained on the employment history and sociological and demographic characteristics of students graduating in the 1964 classes of three predominantly white colleges in Louisiana. These data were compared with similar information on graduates from four predominantly Negro colleges in Louisiana (obtained from concurrent grant studies, numbers 91-17-01, 02, 03, and 04). The analytical comparisons made covered job placement, employment experience, wage income and other factors.

**Completed.**

**Grant No.:** 91-34-66-57

**Institution:** New York University  
New York, New York

**Principal Staff:** Dr. Abraham L. Gitlow, School of Commerce.

**Project Title:** Unskilled Workers in the Labor Force: Problems and Proposals

**Objectives and Procedures:** This grant helped to support a half-day conference for 500 employers in New York City. By demonstrating to employers that, by hiring the handicapped, they not only help expand job opportunities for the handicapped but also help fill their own shortages of unskilled workers, it showed that both problems can be alleviated.

**Completed.**

**Grant No.:** 91-34-67-06

**Institution:** New York University  
New York, New York

**Principal Staff:** Dr. Jeanne L. Noble, School of Education.

**Project Title:** An Exploratory Study of Domestic's View of Their Working World

**Objectives and Procedures:** This pilot study will collect information on a group of domestic workers, representative of the occupational group living in central Harlem. Newly developed data-gathering procedures and interview and observation instruments will be tested to determine the feasibility of a future intensive study of the domestic's working world.

Fifty domestics will be randomly selected from one of the five geographic areas encompassed by the Harlem Neighborhood Boards operating under the Har- you Act. They will take part in open end interviews and complete structured questionnaires. Five of the women will be observed on the job and interviewed in depth. An open end interview guide for employers will also be developed and tested.

**Completion Date:** Fall 1967.

**Grant No.:** 91-34-67-07

**Institution:** State University of New York  
Buffalo, New York

**Principal Staff:** Dr. Haskel Benishay, Department of Finance and Management Science.

**Project Title:** Development of Stochastic Labor Force and Working Life Models

**Objectives and Procedures:** The objective of this research is to construct and test new mathematical models for use in studying the dynamics of the labor force and its components. Probabilistic aspects of the labor force process—lifespan distributions, births and deaths per period, participation and unemployment rates, and numbers of accessions and retirements—are generally treated in existing models as random variables resulting from the process. Models developed in the present study will treat these phenomena as the determinants of the labor force process, and allow for their fluctuations in evaluating and forecasting man- power reserves and flows of the labor force and its subcategories.

Probability and mathematical theory will be ap- plied to currently available data on the labor force to construct the models. Computer simulation techniques will be used to check the logic of models and the di- rection of change resulting from variation in under- lying assumptions.

**Estimated Completion Date:** January 1968.

**Grant No.:** 91-23-67-49

**Institution:** Northeastern University  
Boston, Massachusetts

**Principal Staff:** Dr. John Duncan A. Ferguson,  
Department of Sociology.

**Project Title:** A Pilot Study of Career Decision- making

**Objectives and Procedures:** The main effort in this study will be directed toward analyzing crucial career decisions which determine an individual's sub- sequent employment in particular jobs or occupations. Such decisions might include a worker's refusal of a particular job in his company and his being bypassed for promotion later, or his refusal to undergo training which may not be offered again. Secondary objectives are to compare job satisfaction among workers in an urban neighborhood and to determine training pro- gram needs in this same neighborhood.

Information on career aspirations and job history will be obtained from a sample survey of residents of an ethnically and racially mixed, primarily low-income area of central Boston, now undergoing urban renewal. A random sample of about 200 male residents will be drawn from this population and interviewed regard- ing their career history, present occupational goals, and the considerations that governed their choice of jobs in the past, with emphasis on the respondent's perception of the crucial turning point in his career.

**Estimated Completion Date:** September 1968.

**Grant No.:** 91-23-67-57

**Institution:** Northeastern University  
Boston, Massachusetts

**Principal Staff:** Dr. Morris A. Horowitz and Dr. Harold M. Goldstein, Department of Economics.

**Project Title:** Hiring Standards for Paramedical Manpower



**Objectives and Procedures:** This project will test the hypothesis that persistent shortages of paramedical personnel are caused by unrealistic hospital hiring standards. The education, training, and work experience required of new hires and how these standards were developed will be analyzed and compared with duties actually performed in the various paramedical occupations. Findings are expected to provide some important insights into future training needs and a basis for possible reevaluation of hiring standards for paramedical personnel.

The researcher will interview the administrators and personnel directors of a stratified sample of about 24 hospitals in the Greater Boston area. Structured questionnaires will be used to obtain detailed information on job descriptions and hiring standards for each of the paramedical occupations and on the general characteristics of each occupation, including wage rates, turnover, promotion opportunities, and training offered on the job. Unstructured questionnaires will be used in interviewing a chief executive at each hospital for his comments and suggestions on the diverse problems related to employment in the paramedical field.

**Estimated Completion Date:** September 1968.

**Grant No. 91-05-67-29**

**Institution:** Oakland Small Business Development Center, Inc.  
Oakland, California

**Principal Staff:** Dr. Jack Brown, Director of Research.

**Project Title:** A Study of the Manpower Implications of Small Business Financing

**Objectives and Procedures:** This study is concerned with the role of discriminatory banking practices in restricting economic opportunity in minority group neighborhoods. The various means of financing available to white, Spanish-speaking, and Negro businessmen will be analyzed in an attempt to link small business failures to possible discrimination in lending practices; to relate small business success to the overall employment picture for minority groups; and to assess the nature and extent of employment opportunities available to small business enterprises.

Data will be collected through questionnaire interviews with 238 small businessmen of different racial and ethnic backgrounds operating stores on East 14th Street in Oakland, Calif. Questions will be asked concerning the merchants' banking activities, success or failure in obtaining commercial loans from banks at equitable rates of interest, alternate sources of financing, details on manpower and employment for workers in each firm, and the number and kinds of jobs the merchant could make available if the necessary financing could be obtained. Direct observation by interviewers in the field, credit checks, and secondary sources will be used to supplement questionnaire results. A control group will be selected from similar businesses in dissimilar neighborhoods in Oakland.

**Estimated Completion Date:** April 1968.

**Grant No.: 91-39-66-38**

**Institution:** University of Oregon  
Eugene, Oregon

**Principal Staff:** Dr. Donald A. Watson, Bureau of Business and Economic Research.

**Project Title:** An Input-Output Model for Use in Manpower Projections for a State

**Objectives and Procedures:** This project will design a system for collecting and analyzing data for use in constructing income and product accounts for a State. An input-output flow model and a workable model for making short-term forecasts of population, labor force, and industrial employment will be developed, using Oregon as the example. Data on the rates of technological change in various industries will be used to project the size of occupational groups in order that plans for vocational education can be made. Existing analytical models and data, especially projections of industry growth made by the University's Bureau of Business and Economic Research and projections of population and labor force made by the Oregon State Board of Census, will be revised and integrated into the development of the model.

**Estimated Completion Date:** Fall 1967.

**Grant No.: 91-40-67-02**

**Institution:** University of Pennsylvania  
Philadelphia, Pennsylvania

**Principal Staff:** Ann R. Miller, Population Studies Center.

**Project Title:** Development of a Classification System of Data From Occupational Training Survey on the Training Background of the Labor Force

**Objectives and Procedures:** This project will examine the relationship between a person's occupation and his education or training. Its purpose is to determine the specific training background of the labor force by its current occupational affiliation and to determine the current occupational affiliation of persons in the labor force who have had various types of specific training. The analysis will emphasize differences among occupational groups in the proportions of persons with less than 3 years of college who (1) have no formal training, (2) have training in a directly related field, and (3) have training in another field. The relationship between major field of study and occupation will be determined for those with 3 or more years of college. Some of the data for the study will be obtained from Bureau of the Census tapes and from the U.S. Department of Labor survey on *Formal Occupational Training of Adult Workers* conducted in April 1963.

**Estimated Completion Date:** Fall 1967.

**Grant No.: 91-16-66-28**

**Institution:** Purdue Research Foundation  
Lafayette, Indiana

**Principal Staff:** Dr. Carolyn C. Perrucci, Departments of Sociology and Engineering Administration.

**Project Title:** Engineers and Scientists: A Comparative Analysis of Professional Values and Behavior

**Objectives and Procedures:** This project will attempt to determine whether scientists and engineers are professionals, and, if so, whether they are members of the same professional group. Data already have been collected by mail questionnaires to random samples of 5,000 Purdue University alumni who grad-

uated between 1947-64 with bachelor, master, and doctoral degrees in nine engineering subgroups and four science subgroups. Analysis of the tabulated data will focus on three criteria and occupational professionalism: (1) The influence of educational background on adaptation to organizational work roles; (2) organizational career history; and (3) degree of participation in outside professional activities which provide contact with colleagues and dissemination of knowledge.

**Estimated Completion Date:** Fall 1967.

**Grant No.: 91-16-67-43**

**Institution:** Purdue University  
Lafayette, Indiana

**Principal Staff:** Dr. Carolyn C. Perrucci, Departments of Sociology and Engineering Administration.

**Project Title:** The Female Engineer and Scientist: Factors Associated With the Pursuit of a Professional Career

**Objectives and Procedures:** This research is concerned with womanpower as a relatively untapped source of talent for meeting the national demand for engineering and science graduates. Employed and unemployed women graduates in engineering and science will be compared with respect to social background, education, career history, temporal patterns in marriage and childbearing, nature and extent of technical obsolescence, and attitudes toward work and career. Employed women graduates in these fields will also be compared with their male counterparts with respect to salary, level of technical responsibility, and level of supervisory authority.

Randomly selected subsamples of female engineering and science graduates were obtained from a larger study of Purdue alumni. Fifteen subfields within engineering and science were represented, and a total of 430 women were sampled, with a return rate of 70 percent. The comparisons with male engineering and science alumni will utilize data developed under grant no. 91-16-66-28.

**Estimated Completion Date:** September 1968.

**Grant No.: 91-34-66-48**

**Institution:** University of Rochester  
Rochester, New York

**Principal Staff:** Dr. Dean Harper, Department of Sociology.

**Project Title:** The Relationship of Migrant Workers' Attitudes and Behavior to Their Work Environment

**Objectives and Procedures:** This project will continue research begun under an earlier grant. It will describe the relative impact of environmental determinants of migrant worker behavior, attitudes, and productivity, and will present case studies of a sample of workers.

Data consist of the results from structural questionnaires administered to 141 migrants and 16 taped interviews. This material will be examined for recurring themes and issues that appear significant in the lives of migrant farmworkers.

**Estimated Completion Date:** Early 1968.

**Grant No.: 91-46-66-72**

**Institution:** Sam Houston College  
Huntsville, Texas

**Principal Staff:** Dr. George G. Killinger, Institute of Contemporary Corrections and the Behavioral Sciences.

**Project Title:** Job Obsolescence in the Law Enforcement and Correctional Field

**Objectives and Procedures:** This is an exploratory study of the educational and skill qualifications of personnel employed in law enforcement and correctional institutions. The researcher will define minimum skill requirements for these personnel and assess the extent to which law enforcement personnel in Huntsville agencies meet these skill and educational standards. Basic skill and educational requirements will be derived from the curricula of representative institutions offering courses in the field and from inservice training curricula. Evaluation of actual qualifications of present personnel will be based on results of a questionnaire which will be constructed to determine job obsoles-

cence by noting the discrepancy between skills considered important by respondents and those identified as basic by this study.

**Estimated Completion Date:** December 1967.

**Grant No.: 91-10-66-67**

**Institution:** University of South Florida  
Tampa, Florida

**Principal Staff:** Dale O. Cloninger, School of Business.

**Project Title:** A Determination of the Special Labor Force Problems Created by Significant Participation of Retirees

**Objectives and Procedures:** This project considered the special employment and income problems created by substantial numbers of retirees resettling in an economically dynamic area. The researcher measured the labor force participation rate, the extent of postretirement work activity, and the unemployment rate of those defined as the retired population. He also considered the effects on local employment and wages by the presence in the community of a reservoir of skilled, experienced people who may frequently be willing to work for lower wages, and the implications of policies related to alleviating adverse effects on the nonretiree labor force. Basic data were gathered through questionnaires from a sample survey of 1,229 retired households in Pinellas County, Fla., from private and public data collection agencies, and through interviews with members of the business community.

**Completed.**

**Grant No.: 91-15-66-34**

**Institution:** Southern Illinois University  
Carbondale, Illinois

**Principal Staff:** Dr. Herman R. Lantz and Dr. Ernest K. Alix, Department of Sociology.

**Project Title:** A Study of the Relationship Between Resignation and Job Retraining

**Objectives and Procedures:** This project will deal with the problem of individual resignation, a feeling that no change for the better is preferable to the disappointment that may come with efforts to change. Knowledge about the nature of resignation will aid officials who try to introduce change into the lives of unwilling people by educational and counseling programs. In particular, this study will relate an individual's feelings of resignation to participation in job retraining programs. A questionnaire will be used to obtain data from a random sample of 500 potential retrainees being tested at the West Frankfort, Ill., Demonstration Manpower Program. The dimensions of resignation will be abstracted from relevant literature and incorporated into a scale. Resignation scale scores will be matched against favorable or unfavorable response toward retraining.

**Estimated Completion Date:** Fall 1968.

**Grant No.:** 91-05-66-53

**Institution:** Stanford University  
Stanford, California

**Principal Staff:** Dr. Melvin W. Reder, Department of Economics.

**Project Title:** International Differences in Unemployment Rates of New Entrants to the Labor Force

**Objectives and Procedures:** This project will consider the question of how a number of Western European countries have been able to maintain rates of unemployment consistently and appreciably lower than those of the United States over the past decade. The researcher will attempt to measure the relative importance of the lower unemployment rates of young people and recent immigrants in explaining overall differences in unemployment rates, to analyze the causes of these differences and to appraise their relative importance, and to consider the implications of the analysis for public policy. Using unemployment data for recent labor force entrants in the United States and in several Western European countries, conventional econometric techniques will be exercised to relate international and regional differences in the rates to differences in relevant economic structures and institutions.

**Estimated Completion Date:** January 1968.

**Grant No.:** 91-40-68-08

**Institution:** Temple University  
Philadelphia, Pennsylvania

**Principal Staff:** Dr. Karen Koziara, School of Business.

**Project Title:** Labor Force Nonparticipation of Males in Urban Poor Areas

**Objectives and Procedures:** This study is concerned with the prevalence of nonparticipation in the labor force among male slum residents of prime working age. It will develop and test methods for isolating the economic and social characteristics of the nonparticipants and contrasting them with the characteristics of their employed counterparts. The major variables to be dealt with include previous employment experience, income incentives, social and familial surroundings, and traditional employment barriers. A second purpose of the study is to determine whether the research methods used in this project represent a valid approach to the problem of labor force nonparticipation and its causes.

A sample of labor force participants and nonparticipants will be drawn from a population of males aged 20 to 64 years residing in Philadelphia slums. Data will be collected through a specially designed questionnaire, to be administered in personal interviews, covering family background, peer group labor force patterns, income sources, income expectations, personal employment history, and attitudes toward work and leisure.

**Estimated Completion Date:** July 1968.

**Grant No.:** 91-45-67-19

**Institution:** Vanderbilt University  
Nashville, Tennessee

**Principal Staff:** Dr. T. Aldrich Finegan, School of Economics.

**Project Title:** The Economics of Labor Force Participation

**Objectives and Procedures:** This grant supports the final phase of an ongoing study of labor force

participation rates of various population groups in the United States. The objectives of the total study are to identify and explain the economic determinants of the various rates and to assess the policy implications of the patterns of participation and their determinants.

The effects of wage rates, unemployment rates, and supply and demand conditions are being assessed primarily from intercity regressions for three census years—1960, 1950, and 1940. Time series data on participation, unemployment, and other economic indicators are being examined to gain further insight into the cyclical sensitivity of labor force participation rates and to depict recent trends. Census data are being used to determine the effects of personal and family characteristics on participation decisions. These data will be analyzed, and results of the entire study will be published independently in book form.

**Estimated Completion Date:** February 1968.

**Grant No.:** 91-48-66-05<sup>8</sup>

**Institution:** The University of Vermont  
Burlington, Vermont

**Principal Staff:** Dr. David A. LeSourd, Department of Commerce and Economics.

**Project Title:** Economic Forecasting Model of the State of Vermont

**Objectives and Procedures:** The primary goal of this research project was to construct a modified input-output model of the State of Vermont. Data useful in analyzing income and employment trends, needs, and potential changes were produced.

The procedure involved the identification and definition of the industrial sectors of the State for purposes of this study. Data were collected for the State as a whole and by county on the number of firms and their size. A stratified sample representative of the State's economy was devised. A questionnaire requesting information on sales, by markets, was sent to a number of firms chosen to represent the desired

<sup>8</sup> This project was sponsored jointly with the Vermont Central Planning Office, Montpelier, Vt.

sample. The output table for the State was then constructed, analyzed, and tested.

**Completed.**

**Grant No.:** 91-52-66-56

**Institution:** West Virginia University  
Morgantown, West Virginia

**Principal Staff:** Dr. Robert W. Miller, Institute for Labor Studies.

**Project Title:** Social-Psychological Factors Associated With Responses to Retraining

**Objectives and Procedures:** This study will probe the apparent failure of an MDTA training program to fulfill its basic objective of facilitating employment among its graduates. The researcher will endeavor to determine what attempts graduates made to locate jobs; to describe their successes and failures; and to account for their success or failure in terms of the nature of the program itself, the social-psychological characteristics of the graduate, and the social and economic characteristics of the region. Data will be obtained from approximately 350 interviews with graduates of the program and from discussions with the training staff and the West Virginia Departments of Employment Security and Public Welfare.

**Estimated Completion Date:** Fall 1967.

**Grant No.:** 91-05-66-35

**Institution:** Yosemite Junior College District  
Modesto, California

**Principal Staff:** Dr. Frank C. Pearce, Director of Research.

**Project Title:** The Validation of a Specified Testing Program for MDTA Trainees

**Objectives and Procedures:** This study will assess the adequacy of selected testing programs as tools for

measuring an individual's ability to benefit from a given type of vocational training and his probable success on the job. A random sample of 170 trainees at the MDTA multioccupational project in Modesto will be assigned to three groups. Background information will be elicited from each group, and various combinations of tests will be administered at intervals to two of the groups. Scores will be used to anticipate

performance in vocational training and in work for the two groups given tests, and actual performance will show the validity of the tests. Also, the third (control) group, which was treated according to questionnaire results only, will be used to estimate usefulness of the tests.

***Estimated Completion Date:*** August 1968.

## PART 5.

### CONTRACTS FOR BUREAU OF WORK PROGRAMS ACTIVE IN FISCAL YEAR 1967

This section describes both research and evaluation projects being conducted for the Bureau of Work Programs by universities, individuals, and private research organizations.

**Contract No.: 41-7-005-3**

**Contractor:** Arizona State University  
Tempe, Arizona

**Principal Staff:** Dr. Calvin Daane.

**Project Title:** The Development of Group Counseling Models for Potential Uses in the Neighborhood Youth Corps Program

**Objectives and Procedures:** The objective of this project is the development and experimental study of group counseling methods prepared especially for enrollees in out-of-school and in-school Neighborhood Youth Corps (NYC) programs.

The NYC in-school program is designed to help youth from low-income families stay in school. By providing part-time work coupled with counseling and, when necessary, related remedial education and vocational training, the program works to increase the holding power of the schools. Enrollees are encouraged to remain in the program until graduation from high school.

The out-of-school program increases the employability of unemployed youth by providing the work experience, counseling, remedial education, and training that will enable them to return to school. Where return to school is not feasible, the program seeks to bring about an improvement in motivation and work habits that will lead to vocational training or employment.

Six to eight rural and urban NYC programs, chosen because of their unusual success or their use of innovative counseling techniques, will be observed and their counseling procedures analyzed. Group counseling methods used in community agencies, universities, and group work institutes will also be studied and procedures which may be applicable to NYC programs will be isolated.

Five group counseling models developed from this initial research will be tested, using NYC enrollees as subjects.

**Status of Project:** Completion of the project is scheduled for August 1968.

**Contract No.: 41-7-007-9**

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

**Principal Staff:** Dr. Leonard H. Goodman.

**Project Title:** Economic Needs of Neighborhood Youth Corps Enrollees

**Objectives and Procedures:** This project will build on the findings of a pilot study recently completed under a Manpower Research Grant. It will analyze the economic needs of in- and out-of-school NYC enrollees, measure the extent to which these needs are satisfied through the NYC program, and identify the circumstances under which these needs are fulfilled or unfulfilled. (See project 41-7-005-3 for a description of the in-school and out-of-school programs.) Findings are expected to provide a basis for assessing current NYC policies regarding employment and remuneration of enrollees.

A representative national sample of 2,000 NYC enrollees will be selected and interviewed for basic information on enrollee income, expenditures, financial contributions to the family, and personal budgeting habits. This information will be analyzed to determine the respondents' patterns of allocating NYC income and the extent to which it covers their needs. Supplementary information will be gathered on the socioeconomic environment of the respondents, and the size of the NYC project, type of sponsor, program characteristics, type of community, and size of school. Data on school-related expenses and information on the socioeconomic environment of enrollees will be verified by means of additional interviews with school and NYC project officials.

**Status of Project:** Completion is scheduled for September 1968.

**Contract No.: 67-02-02**

**Contractor:** University of California at Los Angeles  
Los Angeles, California



**Principal Staff:** Dr. Melville Dalton, John Glass.

**Project Title:** An Observational Analysis Study of Los Angeles Neighborhood Youth Corps Projects

**Objectives and Procedures:** By making a comprehensive observation of NYC projects, the research team will attempt to establish and interpret trends of progress or decline in achieving NYC goals. The NYC conducts work-training programs for both in-school and out-of-school youth, 16 to 21 years of age. Through an analysis of everyday operating problems, situations which threaten the ultimate success of the project as a whole can be pinpointed. The study will give special attention to the problem of NYC dropouts—reasons for dropping out, the significance of ingroups and cultural differences with respect to individual achievements and failures, and the relative effectiveness of current preventive measures.

At least two NYC projects in Los Angeles will be the subjects of this study. The primary, evaluative portion of the study will be based on information collected by an observational analyst and his associate, whose roles will be strictly those of observers, with no consulting, advising, or monitoring functions included. No questionnaires, testing, or other quantitative techniques will be used; most of the data will be collected by means of notetaking and tape recording. Supplementary data will be gathered from a review of project reports, records, and relevant published material.

**Status of Project:** This project is due to be completed in late 1967.

**Contract No.:** 67-02-01

**Contractor:** Dunlap and Associates, Inc.  
Darien, Connecticut

**Principal Staff:** Dr. Gilbert Teal, Ralph Fabrizio.

**Evaluation Project Title:** Survey of Terminees From Out-of-School Neighborhood Youth Corps Projects

**Objectives and Procedures:** The objective of this research was the collection and analysis of data relating to the postenrollment experiences of former, out-of-school NYC enrollees. (See project 41-7-005-3 for a description of the in-school program.) The success

of these youth was measured by whether they had gotten and retained jobs or were participating in occupational and educational pursuits to increase their employability.

A sample of 2,000 NYC terminees from 50 out-of-school projects was constructed, and the youth completed a questionnaire designed to assess the economic, educational, and related determinants of their status. Other information was gathered from personal interviews with terminees, project personnel, and other sources as appropriate, relating to terminees' characteristics, postenrollment employment history, subsequent educational and skills-training experiences, and attitudes toward the program. The influence of such variables as sex, race, regional background, unemployment rates, and rural vs. urban upbringing on terminees was also examined.

**Status of Project:** The final report was submitted in the spring of 1967.

**Highlights of Findings:** The findings revealed that 59 percent of the youth sampled were in "employment-related" or "school-related" activities when contacted 5 to 15 months after termination. Sixty percent of the youngsters who found jobs did so through State Employment Services, NYC personnel, relatives, and friends. The remaining 40 percent—similar youth living in poverty, without work or education—found jobs on their own.

Another important finding of the study showed a rising rate of participation among terminees in educational and skills-training pursuits or in gainful employment as time went on—50 percent of the youth were engaged in work or training or in school the first week following termination, as compared to 59 percent engaged in these activities when interviewed some months later.

**Contract No.:** 61-7-002-09

**Contractor:** Economic Systems Corporation  
Washington, D.C.

**Principal Staff:** Van Henderson.

**Evaluation Project Title:** Pilot Evaluation of the New Careers Program

**Objectives and Procedures:** Under this contract, an evaluation procedure applicable to the New Ca-

reers Program will be designed and implemented. The New Careers Program, authorized by Congress under a 1966 amendment to the Economic Opportunity Act, is administered by the Department of Labor. It provides grant and contract support for projects designed to prepare unemployed and low-income adults for entry into career jobs in public service as support/subprofessional personnel. Such jobs must offer possibilities for continuing, full-time employment and advancement.

Individual projects will be assessed with regard to: (1) Overall effectiveness; (2) the effectiveness of major project components, such as identification of new careers and career ladders, design and conduct of academic and vocational training programs, followup job placement, and liaison with significant community groups; (3) the strength of the techniques used to implement major project components, such as those employed in reaching potential enrollees, generating job opportunities, and matching jobs to individuals; and (4) the impact of the program on its target population.

Study findings will provide tentative evaluation procedures for aiding management in securing information needed for program planning, execution, and assessment. Systems techniques will be used to construct an evaluation methodology. A sample of projects undertaken as part of the New Careers Program will be the subject of initial testing of the methodology, and the results will determine its validity.

**Status of Project:** Completion is tentatively set for October 1968.

**Contract No.:** 66-00-09

**Contractor:** Educational Testing Service  
Development Research Division  
Princeton, New Jersey

**Principal Staff:** Dr. Norman C. Freeberg, Dr. Michael J. Patton, Dr. Donald A. Rock.

**Project Title:** Development of Evaluation Instruments for Use With the Neighborhood Youth Corps Program

**Objectives and Procedures:** This is a two-stage study concerned with the development and refinement of tools for measuring the achievements of NYC pro-

grams. (See project 41-7-005-3 for a description of NYC programs.) Initial research goals include: (1) Translation of accepted goals or criteria in terms of measurable program outcome; (2) selection of specific instruments to measure program outcome; (3) a pre-test of the accuracy of those instruments now used in evaluating NYC-type programs, and construction of new instruments where required; (4) estimation of the suitability of each instrument and the techniques required for its administration, based on a representative sample survey of NYC enrollees; and (5) preparation of a study plan for the optimum utilization of these specialized tools in conducting a longitudinal evaluation of the NYC program.

The second stage of the project will concentrate on the further refinement of the system of evaluation measures. Samples of the most appropriate instruments will be assembled and a detailed study plan provided for their widespread use in assessing NYC operations.

The research staff has collected data on both in- and out-of-school programs, including profiles of the characteristics of the sponsoring agencies; forms of training provided and training techniques employed; and the amount and type of vocational guidance provided. Information on evaluation instruments—how they are developed and scored and whether they are currently used—has been collected from NYC headquarters in Washington, D.C., and from sponsoring agencies, schools, and welfare facilities. Program goals and criteria were defined in specific measurable terms, including ultimate criteria (i.e., steady employment) and more immediate goals (i.e., improved speech, better school grades). The required forms of measurement were tentatively developed, ranging from tests of intellectual ability in verbal and reasoning skills to assessments of social and value judgments and vocational attitudes. The scope of tools for measuring enrollee characteristics was defined to include available demographic data, biographical information, general intellectual ability measures, social orientation measures, vocational perception tests, jobseeking and jobholding skills, counselor rating scales, work supervisor rating scales, teacher ratings, and enrollee self-evaluation ratings. Exploratory development and pretesting of new measures have been completed and available measures studied and tested.

**Status of Project:** Progress reports have been submitted and a final report on the first stage of the study is expected in early fall 1967.

**Contract No.: 41-7-010-34**

**Contractor:** Fordham University  
Bronx, New York

**Principal Staff:** Dr. Mary G. Powers, Gerald M. Shattuck, Dr. Charles Elliot.

**Project Title:** The Job Supervisor's Role in Neighborhood Youth Corps Programs for Out-of-School Youth

**Objectives and Procedures:** The NYC job supervisor, usually a regular employee of an NYC sponsoring agency (such as a city government, the public library system, or a public hospital), probably has closer contact with the out-of-school enrollee than does any other NYC official. (See project 4-7-005-3 for a description of the out-of-school program.) This project will examine the present nature of the job supervisor role in NYC out-of-school projects in New York City, focusing on the following: (1) The expectations of the national NYC, and of the agency within which the job supervisor functions and (2) the conception of the job, and its acceptance and performance by incumbents. In addition, the study will describe the demographic and social characteristics of job supervisors, and will provide data to assist in the recruitment, training, and direction of job supervisors.

The initial period of the project will be spent in observational analysis of NYC out-of-school job supervision at different types of job sites. Following this, a detailed study design will be developed, and interviewing of job supervisors, enrollees, and NYC staff personnel will be conducted. Analysis of NYC documents and related publications will supplement the observational analysis and interviewing.

**Status of Project:** Completion is scheduled for November 1968.

**Contract Nos.: 41-7-004-9 and  
81-09-66-19**

**Contractor:** The George Washington University  
Center for the Behavioral Sciences and  
Social Research Group  
Washington, D.C.

**Principal Staff:** Dr. Regis H. Walther, Dr. Shirley D. McCune.

**Project Title:** A Study of the Effectiveness of Selected Out-of-School Neighborhood Youth Corps Programs

**Objectives and Procedures:** Phase I (81-09-66-19) of this two-phase study is confined to urban NYC programs for youth who are no longer in school. (See project 41-7-005-3 for a description of the NYC out-of-school program.) An attempt will be made to evaluate the effectiveness of these programs through in-depth, followup studies, using experimental and control groups in four cities. Selected program elements of these same projects will also be evaluated including remedial education, job development, a combined education and work-experience program, and alternative administrative structures.

Building on these findings, phase II of the study (41-7-004-9) will compare selected urban NYC projects for out-of-school youth in terms of how well they facilitate the adjustment of enrollees to the community and work environments. A guide will be prepared during this phase of the study to assist NYC sponsors in evaluating their own programs. The research team will examine six additional program components in which sponsors appear to be unusually successful in accomplishing specific program goals or are trying a unique approach which offers promise of achieving good results. Data will be collected from followup studies of 1,600 NYC enrollees and control groups in four cities, many of whom were interviewed in phase I of the project. Group counseling techniques will be developed and tested during phase II; procedures for this experiment are still in the planning stage.

**Status of Project:** Field work has been completed, and a report on phase I of the project is scheduled for fall 1967. Phase II will be completed in mid-1968.

**Contract Nos.: 41-7-008-25 and  
66-00-08**

**Contractor:** University of Minnesota  
Minneapolis, Minnesota

**Principal Staff:** Dr. Richard E. Sykes.

**Project Title:** A Pilot Study on Observational Measurement of Behavioral Factors Associated With Increased Employability of Out-of-School Neighborhood Youth Corps Enrollees

**Objectives and Procedures:** This study will test the validity of nine hypotheses developed during a recent study of increasing employability among NYC enrollees. The project will also test the value of observational measurement as a method of studying increased employability.

Several concepts developed during the preliminary research study underlie the project's hypotheses. "Employment readiness behaviors" are those habits and attitudes which a worker must possess in order to hold even an unskilled job. These include regular attendance, notification when absence is unavoidable, promptness, discrimination of work cues, verbal interaction, effective signs of work interaction, dress and appearance appropriate to the work context, tolerance of deferred gratification, and responsiveness to social as well as material rewards. In order to achieve upward mobility, a worker must also demonstrate additional behaviors, called "employment-level mobility behaviors," including specific skill performance and excellence of performance. All of these behaviors are susceptible to observational measurement. The assumption which underlies each of this project's specific hypotheses is that the employability of the NYC enrollee increases as frequencies of employment readiness behaviors and employment-level mobility behaviors increase.

A random, stratified sample of out-of-school NYC enrollees in Minnesota will be observed in two 2-hour periods during the first 2 weeks of employment, at the end of 10 weeks, and at the end of 22 weeks. Enrollees will also be tested for intelligence, reading ability, and reinforcement needs. Observational techniques will be used to measure work contexts, enrollee work roles, and supervisor-enrollee interaction.

**Status of Project:** Completion is scheduled for June 1968.

**Contract Nos.: 41-7-001-40 and  
81-40-66-18**

**Contractor:** National Analysts, Inc.  
Philadelphia, Pennsylvania

**Principal Staff:** Dr. Gerald D. Robin.

**Project Title:** A Study of the Year-Round and Summer Neighborhood Youth Corps Program for In-School Students

**Objectives and Procedures:** The Neighborhood Youth Corps offers "summer only" and "year-round" programs for in-school youth, 14 through 21 years of age, who come from low-income families. The summer program consists of 10 to 12 weeks of paid work experience (32 hours per week), administered under professional guidance and supervision. The year-round program provides, in addition to summer work, continuing work experience of up to 15 hours a week during the school term.

To compare the relative effectiveness of the year-round and summer-only programs, samples of in-school enrollees from these programs in two cities, as well as control groups of youth who met the requirements and who applied but were not enrolled due to lack of NYC positions, will be selected. Measurements of attitudinal and behavioral changes will be based on periodic interviews with the enrollees and the control group. Interviews with a sample of enrollees' parents will also be conducted. An analysis of school and police records will supplement information obtained from the interviews.

**Status of Project:** Interviewing has been completed and the final report is scheduled for the end of 1967.

**Contract No.: 66-00-10**

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

**Principal Staff:** Dr. Robert McNamara, Charles Kamen.

**Evaluation Project Title:** A Study of the Effectiveness of a National Sample of NYC In-School Projects

**Objectives and Procedures:** The present study will provide tools for measuring the effectiveness of the NYC in-school program, based on: (1) Reduced school dropout rates; (2) improved attitudes relating to school and job performance; (3) improved school performance; and (4) increased ability to cope with postschool experiences. (See project 41-7-005-3 for a description of the NYC in-school program.)

A secondary objective is to secure basic descriptive data on the nature and variety of existing programs, characteristics of cooperating school systems, and characteristics of enrollees.

The research will be carried out in two stages. During the first, a questionnaire will be designed and sent to local NYC sponsors soliciting information on recruitment and counseling techniques, work assignments, liaison with schools, and the teaching of work habits and disciplines. Selection will be made of a national sample of 4,000 enrollees and an 800-member control group. Another questionnaire will be constructed to measure attitudinal changes of the enrollees. Plans and techniques will be formulated for a followup study of the sample of enrollees.

In the second stage of the study, data will be collected and analyzed concerning the nature, administration, and content of NYC programs throughout the country, and descriptive information obtained on enrollee characteristics and school and job performance.

**Status of Project:** The project is expected to be completed in mid-1968.

**Contract No.:** 41-7-006-25

**Contractor:** North Star Research and Development Institute  
Minneapolis, Minnesota

**Principal Staff:** Dr. Guy H. Miles.

**Project Title:** Optimizing the Benefits of Neighborhood Youth Corps Projects for Rural Youth

**Objectives and Procedures:** This is a two-part project to provide guidelines for maximizing the benefits of Neighborhood Youth Corps projects for rural youth. The objectives of the first part are: (1) To define the problems confronting rural youth, both those who remain on the farm and those who move to other environments; (2) to develop hypotheses regarding the determinants of successful transition to nonrural life; and (3) to outline an NYC program that would best meet the needs of farm youth. If these objectives are completed satisfactorily, work will proceed on the second part of the study—the validation of hypotheses.

Interviews will be conducted with rural and small town leaders, NYC sponsors and participants, and non-NYC rural youth in four midwestern States. Information will also be collected from Employment Service officials and personnel managers, city social group and labor union leaders, policemen, and welfare workers in Minneapolis-St. Paul and Des Moines. Interviews

are expected to yield information relevant to: (1) Reason for outward migration from rural counties; (2) problems encountered in the cities and in smaller towns by farm youth seeking employment; (3) causes of success or failure during the transition period between farm and nonfarm living; and (4) characteristics of an NYC program that would best meet the needs of farm youth. In addition, the study will interview selected rural NYC sponsors in depth and will evaluate each program in terms of its ability to solve the problems of farm youth.

**Status of Project:** Completion of the first stage of the study is scheduled for July 1968.

**Contract No.:** 61-7-001-09

**Contractor:** Planning Research Corporation  
Washington, D.C.

**Principal Staff:** Dr. Allan H. Muir.

**Evaluation Project Title:** A Study to Develop and Test an Evaluation System for the New Careers Program

**Objectives and Procedures:** This project will use cost-effectiveness techniques in designing a system for evaluating projects under the New Careers Program. (See project 61-7-002-09 for a description of this program.) The system is expected to provide a more accurate basis for measuring a project's efficiency in allocating its resources and its success relative to national program goals. National and regional offices should find this particularly helpful in carrying out a continuing appraisal of goals and performance through periodic assessments of individual project achievements. While the evaluation methodology being developed under this contract is tailored to the New Careers Program, most of the tools should be generally applicable to other job training programs.

The national objectives and long-range goals of the New Careers Program will be translated in terms of the individual projects, and a comprehensive input-output study of each project will be constructed. The system will be pretested on selected projects and refined as necessary.

**Status of Project:** Completion is scheduled for late 1967.

**Contract No.: 51-7-001-09**

**Contractor:** Planning Research Corporation  
Washington, D.C.

**Principal Staff:** Dr. Allan H. Muir.

**Evaluation Project Title:** A Study to Develop and Test an Evaluation System for Operation Mainstream

**Objectives and Procedures:** Maximum application of cost-effectiveness techniques are an essential feature of the project evaluation system which is being developed under this contract. The system will enable program planners to make a more confident evaluation of Operation Mainstream with respect to each project's success in meeting national program goals and in managing its available resources. Operation Mainstream, formerly known as the Community Employment and Betterment Program, was authorized by Congress under a 1965 amendment to the Economic Opportunity Act. Responsibility for administering the program is vested in the Secretary of Labor. Operation Mainstream provides grant support for projects designed to furnish meaningful work experience and training to unemployed adult poor persons in activities which will improve the social and physical environment of the community. It is the intention of the program that the training and experience provided will lead to permanent, remunerative employment. A successful evaluative technique will be particularly valuable to national and regional offices as a guide in measuring achievements against projected plans, thereby permitting a continuing appraisal of plans and performance. While specifically designed as a national system of evaluation for individual Operation Mainstream projects, the methodology is expected to be adaptable to other, similar manpower programs as well.

Evaluation criteria will be linked with the broad objectives and projected goals of Operation Mainstream. These objectives and goals will be converted to the project level, and a detailed input-output study of individual projects will be conducted. Proposed evaluation techniques will be applied to existing programs to test the feasibility of the system and to identify areas needing modification and improvement.

**Status of Project:** The expected completion date is December 1967.

**Contract No.: 81-35-67-01**

**Contractor:** Research Triangle Institute  
Durham, North Carolina

**Principal Staff:** Dr. A. L. Finkner, Dr. Daniel G. Horvitz, Dr. A. M. Huq.

**Project Title:** A Comprehensive Assessment of the Problems and Characteristics of the Neighborhood Youth Corps Enrollees: A Pilot Investigation

**Objectives and Procedures:** This study will develop a documentary framework for classifying Neighborhood Youth Corps enrollees by problem area. Hypotheses related to each problem area—and the program techniques which are most effective in helping youth whose problems can be so classified—will be formulated and tested. Results of the study are expected to provide NYC workers with a sounder basis for foreseeing the potential effects, impact, and general manifestations of problems among enrollees.

Information will be derived from a sample of in-school youth and school dropouts enrolled in an NYC program in North Carolina. Data on selected personal and social characteristics will be obtained through psychological and aptitude tests and personal interviews.

**Status of Project:** A final report is expected late in 1967.

**Contract No.: 41-7-003-46**

**Contractor:** Rice University  
Houston, Texas

**Principal Staff:** Dr. Edwin S. Harwood.

**Project Title:** Organizational Problems in Enrolling Hard-Core Youth and in Creating Attitude Changes in the Houston Neighborhood Youth Corps Projects

**Objectives and Procedures:** The broad objective of this project is to examine the impact of NYC operating procedures on enrollees in two out-of-school and three in-school projects in the Houston metropolitan area. (See project 41-7-005-3 for a description of NYC programs.) The study will identify problems of enrollee recruitment, determine the effec-

tiveness of the NYC program in developing motivation and positive attitudes toward learning among enrollees, and assess the relationship between NYC wage incentives and enrollee recruitment and morale. In addition, the project will study the internal organizational problems of sponsoring agencies and problems affecting the relationship between sponsoring agencies and institutions accepting NYC enrollees.

Three methods of data collection will be employed: (1) Observation of the social interaction and behavior of NYC staff, enrollees, and job supervisors in the five Houston projects, with special emphasis on one in-school and one out-of-school project; (2) informal interviews with staff and enrollees; and (3) formal questionnaire interviews with a sample of enrollees from each project to determine whether their work experience has brought about attitude changes. Additional data will be collected from Houston NYC agency files and from other studies on NYC operations.

**Status of Project:** Completion is scheduled for September 1968.

**Contract No.: 41-7-009-34**

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

**Principal Staff:** Dr. Clyde E. Sullivan, Dr. Wallace Mandell.

**Project Title:** Transition Between "Work Experience" and Work

**Objectives and Procedures:** This study will examine two aspects of the out-of-school NYC program which affect the economic mobility of enrollees: (1) The structuring of work-experience positions by local NYC sponsors; and (2) the coordination and management of the transition from the work-experience program to the next step outside the program (e.g., return to school, enrollment in special educational or training programs, full-time employment, etc.). (See project 41-7-005-3 for a description of the NYC programs.) The effect of NYC work experiences on the enrollees will be evaluated.

The study will compare the critical experiences of four panels of subjects, all of whom will be connected with three out-of-school NYC projects in New York and New Jersey. The panels will consist of: (1) Male enrollees before NYC work experience; (2) male enrollees after substantial NYC work experience; (3) project personnel; and (4) employers and supervisors in post-NYC situations. A conference of key personnel from the projects involved in this study is planned for the fall of 1967, for the purpose of refining and adapting the research design to deal with critical problem areas in NYC programs.

**Status of Project:** Completion of the first phase of this study is scheduled for mid-1968.

**Contract No.: 71-7-001-49**

**Contractor:** Systems Development Corporation  
Falls Church, Virginia

**Principal Staff:** John K. Harris.

**Evaluation Project Title:** An Evaluation of the Special Impact Program in Six Selected Areas

**Objectives and Procedures:** In many urban areas, the Special Impact Program (SIP) and several other federally sponsored work-experience and job training programs are consolidating their resources in the new Concentrated Employment Program (CEP). This study will make a comprehensive evaluation of CEP projects in six selected cities, with particular attention to their SIP component. The Special Impact Program, authorized by Congress under a 1966 amendment to the Economic Opportunity Act, is administered by the Department of Labor. Through grants to public or private nonprofit organizations and through contracts with private organizations, the program provides funds to carry out its basic objective: the solution of critical manpower problems existing in a defined urban community or neighborhood.

The research team will assess the overall effectiveness of each project studied; the contribution of SIP funds to the social and economic services of the total project; and the comparative value of choices made in the expenditure of SIP funds with respect to the population being served.

The diversity of plans for fund usage will be iden-

tified by reviewing proposals for the establishment of projects submitted from various cities. Six cities whose projects are representative of the diversity of fund usages will be selected. The operational structure, developmental problems, and current objectives of individual projects in these cities will be investigated. Researchers will make a periodic review of each project to identify developmental modifications and gauge the impact of the programs on their target populations. Evaluation will be based on the degree to which project output parallels national program objectives, emphasizing the contribution of the SIP component in amplifying local project services.

**Status of Project:** Completion is scheduled for October 1968.

**Contract No.: 51-7-002-34**

**Contractor:** United States Research and Development Corporation  
New York, New York

**Principal Staff:** Dr. Robert H. Clampitt.

**Evaluation Project Title:** Pilot Evaluation of the Operation Mainstream Program

**Objectives and Procedures:** Under this contract, a sample of Operation Mainstream projects will be examined and evaluated from the standpoint of: (1) Individual project goals vs. broader national program objectives; (2) major project components and services; (3) staffing procedures; (4) characteristics of enrollees; (5) major operational and administrative problems; and (6) the program's impact on its enrollees and the community. (See project 51-7-001-09 for a description of the Operation Mainstream Program.) A subsidiary objective of this research is to secure data on voluntary and involuntary terminees. These and other data will be used in determining the feasibility of conducting a structured, followup study of terminees.

The report resulting from this study will contain recommendations and guidelines for future evaluational procedures and suggestions for operational and administrative changes to heighten program effectiveness.

After a preliminary review of Mainstream opera-

tions at the Federal level, questionnaires designed to yield information on significant aspects of these projects will be sent to all local project sponsors. Field evaluations of 15 to 18 projects will include in-depth interviews with at least 10 percent of the enrollees in each project.

**Status of Project:** The estimated completion date is fall 1967.

**Contract No.: 41-7-002-37**

**Contractor:** Western Reserve University  
Cleveland, Ohio

**Principal Staff:** Dr. Frank Friedlander, Dr. Herman Medow, Dr. Stephen Fink.

**Project Title:** A Study of Impact and Effectiveness of the Comprehensive Manpower Project of Cleveland (AIM-JOBS)

**Objectives and Procedures:** This project will study several important aspects of the Cleveland Concentrated Employment Program (CEP), which began operation in June 1967. The Cleveland program—called Project AIM-JOBS—was developed through extensive cooperation among industrial and union leaders, social agency personnel, educators, persons representing poor people in the community, and representatives of the Department of Labor's Manpower Administration and other Federal agencies. Project AIM-JOBS is based on the idea that an individualized approach is necessary in the effort to help poor people help themselves. The research project has the following objectives: (1) To examine the effectiveness of the project in increasing job opportunities for the disadvantaged; (2) to study AIM-JOBS' impact on participating enrollees and participating companies; and (3) to study the effectiveness of the project's staff activities. In assessing the value of the project, special attention will be given to its methods for helping the younger enrollees.

Information will be obtained on the relative changes in self-concepts, motivation, occupational status, and psychological behavior of enrollees participating in the project. Information will also be collected on the attitudes of employers and coworkers toward hiring and working with the enrollees, and on the functions



and activities of project staff members. Questionnaires, interviews, and observations of the researchers will be the primary sources of data. Relevant data will also be obtained from comparison groups of unemployed and underemployed persons outside the CEP program. Research information resulting from this study is ex-

pected to be used to improve the techniques and operations of other projects designed to generate jobs for the disadvantaged.

*Status of Project:* A final report on the project study is expected in mid-1968.

## **PART 6.**

### **SELECTED LIST OF COMPLETED PROJECTS**

**This section lists projects completed under the Manpower Administration's research program, which was begun in 1962.**

## CONTRACTS

<i>Contractor and Principal Investigator(s)</i>	<i>Title</i>	<i>Availability</i> <sup>9</sup>
American Association of University Women Educational Foundation ELEANOR DOLAN	Counseling Techniques for Mature Women	
American Institute for Research M. V. ENINGER, SR.	School and Community Factors in Employment Success of Trade and Industry Course Graduates	
Arthur D. Little, Inc. ARTHUR A. BROWN	Analysis of Automation Potential by Means of Unit Operations	
Auerbach Corporation RICHARD RIDALL MURRAY DODGE	Manpower for Technical Information Work—A Pilot Study	Washington: U.S. Department of Labor, Manpower Administration, Office of Manpower Policy, Evaluation, and Research, 1964, Manpower/Automation Research Monograph No. 1.
Bureau of Social Science Research, Inc. LAURE M. SHARP	The Employment of Retired Military Personnel	<i>Monthly Labor Review</i> , January and February 1967.
University of California (Berkeley) LOUIS E. DAVIS E.R.F.W. CROSSMAN	Evaluation of Changes in Skill Profile and Job Content Due to Technological Change: Methodology and Pilot Results from the Banking, Steel, and Aerospace Industries	
University of California (Berkeley) MARGARET S. GORDON	Retraining and Labor Market Adjustment in Western Europe	Washington: U.S. Government Printing Office, 1965, Manpower/Automation Research Monograph No. 4, \$1.75.
University of California (Berkeley) R. A. GORDON	Long-Term Manpower Projections—Proceedings of a Conference on Unemployment and the American Economy	

<sup>9</sup> Final reports of most projects supported through contracts are available at the libraries and field locations listed in app. A. In addition, publications based on the reports are available as indicated.

- Bureau of the Census  
JOHN BERESFORD
- Bureau of the Census  
STANLEY GREENE
- Bureau of the Census  
STANLEY GREENE
- Bureau of the Census  
ALLAN D. MANNEL
- Bureau of the Census  
ROBERT B. PEARL
- SOL CHANELES
- University of Colorado  
LESLIE FISHMAN
- Columbia University  
AARON WARNER  
PAUL H. NORGREN
- Columbia University  
STAFF: PROJECT FOR THE CONSERVATION  
OF HUMAN RESOURCES
- Special Regional Tabulations of Labor Force  
Status by Educational Attainment, Age, Color,  
Sex, 1960
- Labor Reserve
- Tabulations on the Relationship Between Pat-  
terns of Childbearing and Labor Force Par-  
ticipation of Women
- Pretest Survey on Occupations and Educa-  
tional Background of Local Government Em-  
ployees
- Development of Techniques to Improve Use-  
fulness of Key Labor Force Data
- The Central City Ghetto
- Methodology for Projection of Occupational  
Trends in the Denver Standard Metropolitan  
Statistical Area
- Obsolescence and Updating of Scientists' and  
Engineers' Skills: A Pilot Study
- Economic Growth and Employment Opportu-  
nities for Minorities, Dale L. Hiestand
- The Pluralistic Economy, Eli Ginzberg, Dale  
L. Hiestand, Beatrice G. Reubens
- Scientific and Managerial Manpower in Nu-  
clear Industry, James W. Kuhn
- Manpower and the Growth of Producer Serv-  
ices, Harry I. Greenfield
- The Middle Class Negro in the White Mans'  
World, Eli Ginzberg
- U.S. Census of Population. Washington: U.S.  
Government Printing Office, 1966, \$1.50.*
- Used in 1967 Manpower Report of the Presi-  
dent*
- New York: Columbia University Press, 1964,  
\$6.
- New York: McGraw-Hill Book Co., Inc.,  
1965, \$1.95.
- New York: Columbia University Press, 1966,  
\$7.50.
- New York: Columbia University Press, 1966,  
\$6.
- New York: Columbia University Press, 1967,  
\$5.

*Contractor and Principal Investigator(s)**Title**Availability*

University of Denver  
JAMES MAHER

Short-Term Impacts of Automation and Technological Change on Employment in the Power Laundry Industry

The Diebold Group, Inc.  
DAVID H. WOOG

Criteria and Bases for a Study on the Extent of Automation in American Industry

The Diebold Group, Inc.  
DAVID H. WOOG

U.S. Department of Labor Memorandum Report: Effects of Technological Change on Industrial Employment in the Next Decade

Employment Security, Bureau of  
ALFRED L. GREEN

Manpower and the Public Employment Service in Europe—A Study of Programs and Operations

Employment Security, Bureau of  
UNEMPLOYMENT INSURANCE SERVICE STAFF

Special Work for the Manpower Report of the President

Used in the Manpower Report of the President and A Report on Manpower Requirements, Resources, Utilization, and Training by the U.S. Department of Labor. Washington: U.S. Government Printing Office, March 1965, pp. 159-169, \$1.75.

Georgia Institute of Technology  
JOHN FULMER

Research Design to Forecast Demand for New Types of Technicians in an Industry

Greenleigh Associates, Inc.  
ARTHUR GREENLEIGH

A Study of Unemployed Adults in a Tight Labor Area

Harvard University  
JAMES G. SCOVILLE  
JOHN T. DUNLOP

The Job Content of the U.S. Economy, 1940-1970

Harvard University  
JOHN T. DUNLOP

Internal Labor Markets, Technological Change, and Labor Force Adjustment

Herman Miller, Inc.  
HERMAN MILLER

Income and Education

Used in 1965 Manpower Report of the President.

- University of Houston  
E. E. LIEBHOFKY
- Human Sciences Research, Inc.  
DAVID H. WOOG
- International Labour Organisation  
JACQUES MONET
- International Labour Organisation  
MARCEL ROBERT
- International Labour Organisation  
F. SELLIER  
C. ZARKA
- International Labour Organisation  
GEORGE THOMPSON
- Joint Council on Economic Education  
GEORGE L. FERSH
- Bureau of Labor Statistics  
JOSEPH BLOCH
- Bureau of Labor Statistics  
SOPHIA COOPER
- Bureau of Labor Statistics  
WILLIAM GERBER
- Bureau of Labor Statistics  
DONALD LANDAY
- An Analysis of Forces Underlying Decisions of Potential Workers To Refrain from Labor Force Participation
- Criteria and Bases for a Study on the Extent of Automation in American Industry
- Trends in European Apprenticeship
- Health and Safety Aspects of Automation and Technological Change—A Collection of Abstracts, 1956 to 1962
- International Differences in Factors Affecting Labor Mobility
- Clearinghouse on Automation and Technological Change—A Proposal
- Institutes for Educators on Manpower Requirements
- The Operation of Severance Pay Plans and Their Implications for Labor Mobility
- Formal Occupational Training of Adult Workers: Its Extent, Nature, and Use
- Labor Standards and On-the-Job Training in Foreign Countries
- Labor Mobility and Private Pension Plans—A Study of Vesting, Early Retirement, and Portability Provisions
- Geneva: International Labour Organisation, 1966, CIRF Monograph Vol. 1, No. 2.
- Geneva: International Labour Organisation, 1966, Automation Document No. 7.
- Washington: U.S. Government Printing Office, 1966, BLS Bulletin 1462, 60 cents.
- Washington: U.S. Department of Labor, Manpower Administration, Office of Manpower Policy, Evaluation, and Research, 1964, Manpower/Automation Research Monograph No. 2.
- Washington: U.S. Government Printing Office, 1964, BLS Bulletin 1407, 45 cents.

*Contractor and Principal Investigator(s)**Availability**Title*

Bureau of Labor Statistics  
DONALD LANDAY

*Monthly Labor Review*, August 1966.

Health Insurance Coverage for Workers on Layoff

Bureau of Labor Statistics  
GERTRUDE BANCROFT MCNALLY

Special Tabulations to Show Interrelationship of Family Income, Family Status, and Unemployment

Bureau of Labor Statistics  
GERTRUDE BANCROFT MCNALLY

Pilot Survey of Volunteer Service Work

Bureau of Labor Statistics  
WILLIAM MILLIGAN

Survey of Employment and Unemployment in Slum Areas in 10 Cities

Bureau of Labor Statistics  
NORMAN J. SAMUELS

Pretest of a Survey of Manufacturing Employer Expenditures During 1965 for the Formal Training of Nonsupervisory Employees

Bureau of Labor Statistics  
EDGAR WEINBERG

Job Redesign for Older Workers—10 Case Studies

Washington: U.S. Government Printing Office, 1967, BLS Bulletin 1523, 40 cents.

STANLEY LEBERGOTT

Methods of Forecasting Short-Term Unemployment Change

University of Michigan  
DOROTHY H. COONS

Report of a Study Tour of European Industrial Therapy Programs

University of Michigan  
LOUIS A. FERMAN

The Negro and Equal Employment Opportunities: A Review of Management Experiences in 20 Companies

University of Minnesota  
ELLIOT ARONSON

Unemployment and Retraining: An Annotated Bibliography of Research

Washington: U.S. Department of Labor, Manpower Administration, Office of Manpower Policy, Evaluation, and Research, 1965.

University of Minnesota  
HOWARD E. BERGSTROM

Job Performance of Young Workers in Relation to School Background

- University of Missouri  
R. H. BEZONI
- Counselor Development in American Society  
—Conference Recommendations from Invitational Conference on Government-University Relations in the Professional Preparation and Employment of Counselors
- Washington: U.S. Department of Labor, Manpower Administration, Office of Manpower Policy, Evaluation, and Research, 1966. Also to be published by NBER and distributed by Columbia University Press. For a partial report, see Easterlin, Richard A.
- National Bureau of Economic Research  
RICHARD A. EASTERLIN
- “Economic-Demographic Interactions and Long Swings in Economic Growth,” *The American Economic Review*, December 1966, pp. 1063-1104.
- National Bureau of Economic Research  
GEOFFREY H. MOORE
- New York: National Bureau of Economic Research, 1966, \$12.50.
- National Committee for Children and Youth  
ISABELLA J. JONES
- Washington: U.S. Government Printing Office, 1965, \$1.25.
- National Education Association  
VIRGIL M. ROGERS
- Single copies can be obtained from the NEA Automation Project, 1201 16th Street, N.W., Washington, D.C.
- National Educational Television  
and Radio Center  
HENRY C. ALTER
- Films distributed January-February 1967; shown on NETA stations in series of 12 half-hour programs.
- National Industrial Conference Board  
DANIEL CREAMER
- First appeared in a series of articles in the NICB Record beginning in early 1967. Reprinted in *Journal of Human Resources*, spring 1967, and *Monthly Labor Review*, September 1967.
- National Manpower Policy Task Force
- Identifying Needs and Priorities in Manpower Research
- National Opinion Research Center  
PETER ROSSI
- Graduates of Predominantly Negro Colleges, Class of 1964



3 ml g,

110

*Contractor and Principal Investigator(s)*

*Title*

*Availability*

National Science Foundation  
JOHN K. FOLGER

Symposium on Manpower Theory

New York University  
BRUNO STEIN

Local Manpower Data Programs: An Analysis

University of North Carolina  
DAVID BROWN

Placement for College Teachers  
Academic Labor Markets

North Carolina State University (Raleigh)  
ADGER B. CARROLL  
LOREN B. IHLEN

Costs and Returns of Technical Education: A Pilot Study

North Star Research and Development  
Institute  
GUY H. MILES

Effects of Vocational Training and Other Factors on Employment Experience

Northeastern University  
DEAN S. AMMER

Mechanization and Manpower in Gray-Iron Foundries

Northern Michigan University  
KENNETH L. PARKHURST

Manpower Problems and Economic Opportunities in an Adjusting Regional Economy: The Upper Peninsula of Michigan

Philco Corporation  
A. B. CHALUPSKY

Exploratory Study of Job Performance Aids and Their Potential Impact Upon Training Requirements and Manpower Utilization

FRANK C. PIERSON

Preparation of Material on Professional and Supporting Personnel for the 1967 Manpower Report of the President

Used in 1967 Manpower Report of the President.

The President's Task Force on  
Manpower Conservation

One-Third of a Nation: A Report on Young Men Found Unqualified for Military Service

Washington: U.S. Government Printing Office, 1964, 55 cents.

Research Triangle Institute  
A. L. FINKNER

An Intensive Investigation of the Problem Associated with Young Men Who Are Mentally Unqualified for Military Service

Rutgers—The State University  
JACK CHERNICK

San Jose State College  
R. P. LOOMBA

South Bend Community School Corporation  
NATHANIEL J. PALLONE

Stanford Research Institute  
HARRY KINCAID

Stanford Research Institute  
GERTRUDE D. PETERSON

Stanford Research Institute  
RICHARD ROBERTS

Stanford Research Institute  
RICHARD ROBERTS

Staten Island Mental Health  
Society, Inc.

WALLACE MANDELL  
CLYDE SULLIVAN

Temple University  
LOUIS T. HARMS

The Selection of Trainees Under MDTA and  
the Motivation to Work (A Special Supplement)

A Study of the Reemployment and Unemployment Experiences of Scientists and Engineers Laid Off From 62 Aerospace and Electronics Firms in the San Francisco Bay Area During 1963-65

No Longer Superfluous: The Educational Rehabilitation of the Hard-Core Unemployed

The Scope of Industrial Training in Selected Skilled and Technical Occupations

Oak Glen—A Training Camp for Unemployed Youth

Impacts of Technological Changes in Warehousing

Management Decisions to Automate

Restoration of Youth Through Training

Projective Models of Employment by Industry and by Occupation for Small Areas: A Case Study

Washington: U.S. Department of Labor, Manpower Administration, Office of Manpower Policy, Evaluation, and Research, 1966, Manpower/Automation Research Monograph No. 5.

Washington: U.S. Department of Labor, Manpower Administration, Office of Manpower Policy, Evaluation, and Research, 1965, Manpower/Automation Research Monograph No. 3.

**Contractor and Principal Investigator(s)**

**Title**

**Availability**

University of Texas  
F. RAY MARSHALL  
VERNON M. BRIGGS

Negro Participation in Apprenticeship Programs

Baltimore: The Johns Hopkins Press, 1967, under the title, "The Negro and Apprenticeship," \$8. Also, *Negroes in Apprenticeship*, Washington: U.S. Department of Labor, Manpower Administration, Office of Manpower Policy, Evaluation, and Research, 1967, Manpower/Automation Research Monograph No. 6.

Tuskegee Institute  
L. H. FOSTER

Enhancing the Occupational Outlook and Aspirations of Southern Secondary Youth—A Conference of Secondary School Principals and Counselors (May 8-9, 1964)

Upjohn Institute, W.E.  
HAROLD L. SHEPPARD

The Job Hunt: Jobseeking Behavior of Unemployed Workers in a Local Economy

Baltimore: The Johns Hopkins University Press, 1966, \$7.95.

U.S. Industries, Inc.  
RICHARD WALTHER

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

University of Utah  
REED C. RICHARDSON

Impediments to Geograph. Labor Mobility

Virginia State College (Norfolk)  
WILLIAM F. BRAZZIEL

Factors in Workers' Decisions to Forego Retraining Under the Manpower Development and Training Act

Vocational Guidance and Rehabilitation Services  
ROBERT P. LYERS

(1) Abstracts of Sociological Literature on Occupations  
(2) Sociological Studies of Occupations: A Bibliography

University of Wisconsin  
JAMES STERN  
DAVID JOHNSON

Blue-to White-Collar Job Mobility

Washington: U.S. Government Printing Of-  
fice, 1966, 30 cents.

New Approaches to Counseling Girls in the  
1960's—A Report of the Midwest Regional  
Pilot Conference Held at University of Chi-  
cago Center for Continuing Education, Febru-  
ary 26-27, 1965

Develop Plans for Series of Conferences with  
School Guidance Counselors

National Survey of Child-Care Arrangements  
of Working Mothers

Counseling Girls Toward New Perspectives:  
A Report of the Middle Atlantic Regional  
Pilot Conference Held in Philadelphia, Pa.,  
December 2-4, 1965

Women Workers: Their Special Training  
Needs

Employment Opportunities for Women in  
Subprofessional Occupations

### GRANTS

#### Title

Use of Programmed Case Techniques For In-  
creasing Job Opportunities

The Impact of Defense Contract Termination  
on the Labor Force

Enrollment, Termination, and Program Out-  
comes of Neighborhood Youth Corps Youth  
as Related to Their Economic Needs—A  
Planning Study

Women's Bureau  
MARY HILTON

Women's Bureau  
MARY DUBLIN KEYSERLING

Women's Bureau  
MARY DUBLIN KEYSERLING

Women's Bureau  
MARY DUBLIN KEYSERLING

Women's Bureau  
MARY DUBLIN KEYSERLING

Women's Bureau  
MARY DUBLIN KEYSERLING

#### Grantee

The American University  
CHARLES A. DAILEY

University of Arizona  
TREVOR BAIN

Bureau of Social Science  
Research, Inc.  
LEONARD GOODMAN  
LOUISE JOHNSON

#### Availability

Washington: U.S. Government Printing Of-  
fice, 1966, 35 cents.

## Grantee

## Title

## Availability

Bureau of Social Science  
Research, Inc.  
LAURE M. SHARP

Occupational Adjustment of Recent Low-In-  
come Southern In-Migrants to a Northern  
City

Dillard University  
DANIEL C. THOMPSON

The Dillard Class of 1964

Grambling College  
CHARLES A. BERRY

An Investigation of the Utilization of the  
Manpower Skills of the 1964 Graduating  
Class of Grambling College

University of Maryland  
PAUL WASSERMAN  
MARY LEE BUNDY

Manpower Utilization and Requirements in  
Library and Information Sciences

"Manpower Blueprint," *Library Journal*,  
January 15, 1967; "The Library and Infor-  
mation in a Time of Change," *Pacific North-  
west Library Association Quarterly*, January  
1967.

Massachusetts Institute of Technology  
MALCOLM S. COHEN

The Determinants of the Relative Unemploy-  
ment of Skilled and Unskilled Workers

Dissertation, on microfilm at MIT.

Massachusetts Institute of Technology  
ROBERT EVANS, JR.  
GEORGE E. DELEHANTY

Low-Wage Employment: An Inventory and an  
Assessment

Summary: available from Manpower Admin-  
istration on request.

Massachusetts Institute of Technology  
FRAZIER KELLOGG

Computer-Based Job Matching Systems: An  
Exploration of the State of the Art and the  
Proposed Nationwide Matching System

University of Michigan  
EVA MUELLER

Pilot Study of the Impact of Changes in  
Machine Technology on a Cross Section of  
the Labor Force

University of Michigan  
DAWN DAY WACHTEL

A Survey of Literature on the Working Poor

Available from Manpower Administration on  
request.

- National Opinion Research  
Center  
RICHARD JAFFE  
CAROLYN HUSON  
MICHAEL E. SCHILTZ
- College, Color, and Employment: Racial Differences in Postgraduate Employment Among 1964 Graduates of Louisiana Colleges
- New York University  
ABRAHAM L. GITLOW
- Unskilled Workers in the Labor Force: Problems and Proposals
- Oklahoma State University  
GERALD EUGENE BOGGS
- A Comparative Analysis of the Impact of Various Types of Curriculums on the Vocational Success of School Dropouts
- Oklahoma State University  
GAYLEN R. WALLACE
- An Analysis of Job Satisfaction of Employed Youth Involved in an Experimental School Dropout Rehabilitation Program in Oklahoma City
- St. Mary's College  
SVETOZAR PEJOVICH
- The Role of Technical Schools in Improving the Skills and Earning Capacity of Rural Manpower: A Case Study
- Southern University A. & M. College  
FREDERICK C. TEMPLE
- Economic Forecasting Model of the State of Vermont
- University of Vermont  
DAVID A. LE SOURD
- A Study of the Employment Patterns of Southern University A. & M. College 1964 Graduates
- University of Vermont  
MILTON J. NADWORNYY
- Using Monetary Incentives to Motivate and Stabilize the Employment of Welfare Recipients
- University of Wisconsin  
LEONARD J. HAUSMAN
- Employment Patterns of Xavier University Graduates of 1964
- Dissertation, on microfilm at University Microfilms, Inc., 300 North Zeeb Road, Ann Arbor, Mich.
- Dissertation, on microfilm at University Microfilms, Inc., 300 North Zeeb Road, Ann Arbor, Mich.
- Available from Manpower Administration on request.
- Dissertation, on microfilm at University Microfilms, Inc., 300 North Zeeb Road, Ann Arbor, Mich.

**APPENDIX A**

**DEPOSITORY LOCATIONS FOR REPORTS**

## Appendix A

# DEPOSITORY LOCATIONS FOR REPORTS

The following libraries contain copies of research reports submitted to the U.S. Department of Labor under the contract research program of the Office of Manpower Policy, Evaluation, and Research, Manpower Administration. The libraries are subscribers to the Library of Congress' Documents Expediting Project.

### *Libraries*

#### ALABAMA

University of Alabama  
The Library  
Reference Department  
University, Ala. 35486

Auburn University  
Ralph Brown Draughon Library  
Serials Department  
Auburn, Ala. 36830

#### ALASKA

University of Alaska  
The Library  
Government Documents Division  
College, Alaska 99735

#### ARIZONA

Arizona State University  
Matthews Library  
Documents Librarian  
Tempe, Ariz. 85281

University of Arizona  
The Library  
Acquisitions Department  
Tucson, Ariz. 85721

#### ARKANSAS

Arkansas State College  
The Library  
Acquisitions Librarian  
State College, Ark. 72467

#### CALIFORNIA

California State College at Los Angeles  
John F. Kennedy Memorial Library  
Documents Section  
5151 State College Drive  
Los Angeles, Calif. 90032

California State Library  
Documents Section  
Sacramento, Calif. 95809

University of California  
General Library  
Documents Department  
Berkeley, Calif. 94720

University of California  
The Library  
Documents Department  
Davis, Calif. 95616

University of California  
The Library  
Documents Section  
Riverside, Calif. 92502

University of California  
The Library  
Government Publications Department  
Santa Barbara, Calif. 93106

University of California  
The Library  
Government Publications Room  
Los Angeles, Calif. 90024



**CALIFORNIA—Continued**

University of California  
The Library  
Government Publications Section  
Irvine, Calif. 92650

County of Los Angeles  
Superintendent of Schools  
808 North Spring Street  
Los Angeles, Calif. 90015

The Honnold Library  
Documents Department  
Claremont, Calif. 91711

San Diego State College  
The Library  
San Diego, Calif. 92115

San Fernando Valley State College  
Library-Acquisitions Department  
18111 Nordhoff Street  
Northridge, Calif. 91324

University of Southern California  
The Library  
700 West 35th Place  
Los Angeles, Calif. 90007

**COLORADO**

Colorado State University  
The University Libraries  
Documents Librarian  
Fort Collins, Colo. 80521

University of Colorado  
The University Libraries  
Government Documents Division  
Boulder, Colo. 80304

**CONNECTICUT**

University of Bridgeport  
The Library  
Bridgeport, Conn. 06602

**DELAWARE**

University of Delaware  
Morris Library  
Documents Department  
Newark, Del. 19711

**DISTRICT OF COLUMBIA**

Library of Congress  
Washington, D.C. 20540

**FLORIDA**

Florida State University  
The Library  
Documents Division  
Tallahassee, Fla. 32306

University of Florida  
The University Libraries  
Documents Department  
Gainesville, Fla. 32603

University of South Florida  
The Library  
Documents Division  
Tampa, Fla. 33620

**GEORGIA**

University of Georgia  
The University Libraries  
Documents Section  
Athens, Ga. 30602

**HAWAII**

University of Hawaii  
The Library  
Government Documents Collection  
2425 Campus Road  
Honolulu, Hawaii 96822

**ILLINOIS**

Center for Research Libraries  
5721 Cottage Grove Avenue  
Chicago, Ill. 60637

University of Chicago  
The Library  
Documents Librarian  
Chicago, Ill. 60637

Illinois State University  
Milner Library  
Acquisitions Department  
Normal, Ill. 61761

University of Illinois  
The Library  
Documents Division  
Urbana, Ill. 61803

Northern Illinois University  
Swen Parson Library  
Documents Department  
DeKalb, Ill. 60115

ILLINOIS—Continued

Northwestern University  
The Library  
Documents Department  
Evanston, Ill. 60201

Southern Illinois University  
The General Library  
Serials Department  
Carbondale, Ill. 62903

Western Illinois University  
The Library  
Documents Librarian  
Macomb, Ill. 61455

INDIANA

Ball State University  
The Library  
Muncie, Ind. 47306

Indiana State Library  
Documents Librarian  
140 North Senate Avenue  
Indianapolis, Ind. 46204

Indiana State University  
Director of Libraries  
Terre Haute, Ind. 47809

Indiana University  
The Library  
Documents Librarian  
Bloomington, Ind. 47405

Purdue University  
The Library  
Documents Librarian  
Lafayette, Ind. 47907

IOWA

State College of Iowa  
Library—Serials—A  
Cedar Falls, Iowa 50613

KANSAS

Kansas State University  
The Library  
Acquisitions  
Manhattan, Kans. 66502

University of Kansas  
The Library  
Documents Librarian  
Lawrence, Kans. 66045

KENTUCKY

University of Kentucky  
The University Libraries  
Continuation Division  
Acquisition Department  
Lexington, Ky. 40506

LOUISIANA

Louisiana State University  
The Library  
Government Documents Department  
Baton Rouge, La. 70803

MAINE

University of Maine  
Raymond H. Fogler Library  
Documents Librarian  
Orono, Maine 04473

MARYLAND

Enoch Pratt Free Library  
Documents Division  
Baltimore, Md. 21201

Johns Hopkins University  
Library—Acquisitions  
Baltimore, Md. 21218

University of Maryland  
McKeldin Library  
Social Science Department  
College Park, Md. 20742

MASSACHUSETTS

Lesley College  
Livingston Stebbins Library  
Cambridge, Mass. 02138

MICHIGAN

Detroit Public Library  
Book Receiving Department  
5201 Woodward Avenue  
Detroit, Mich. 48202

Eastern Michigan University  
The Library  
Ypsilanti, Mich. 48197

Michigan State University  
The Library  
Documents  
East Lansing, Mich. 48823

**MICHIGAN—Continued**

University of Michigan  
The Library  
Documents Librarian  
Ann Arbor, Mich. 48104

Wayne State University  
The Library  
Documents Librarian  
Detroit, Mich. 48202

Western Michigan University  
Dwight B. Waldo Library  
Documents Librarian  
Kalamazoo, Mich. 49001

**MINNESOTA**

University of Minnesota  
Walter Library  
Documents Division  
Minneapolis, Minn. 55455

**MISSISSIPPI**

Mississippi State University  
Mitchell Memorial Library  
Acquisition Department  
Serials Section  
Box 1517  
State College, Miss. 39762

University of Southern Mississippi  
The Library  
P. O. Box 53, Station A  
Hattiesburg, Miss. 39401

**MISSOURI**

Kansas City Public Library  
Documents Division  
Ninth and Locust Streets  
Kansas City, Mo. 64106

University of Missouri  
The Library  
Serials Department  
Columbia, Mo. 65202

**NEBRASKA**

University of Nebraska  
The Library  
Documents Librarian  
Lincoln, Nebr. 68508

**NEW HAMPSHIRE**

Dartmouth College  
Baker Library  
Reference Department  
Hanover, N.H. 03755

**NEW JERSEY**

Princeton University  
The Library  
Documents Librarian  
Princeton, N.J. 08540

Rutgers University  
The Library  
Periodical Department  
New Brunswick, N.J. 08901

**NEW YORK**

Brooklyn College  
The Library  
Social Sciences and Education  
Divisions  
Brooklyn, N.Y. 11210  
(Two subscriptions.)

Brooklyn Public Library  
Documents Division  
Grant Army Plaza  
Brooklyn, N.Y. 11238

Columbia University  
The University Libraries  
Documents Acquisition  
535 West 114th Street  
New York, N.Y. 10018

Cornell University  
The University Libraries  
Government Documents  
Ithaca, N.Y. 14850

New York Public Library  
Government Documents  
Fifth Avenue and 42nd Street  
New York, N.Y. 10018

(New York State Library  
Gift and Exchange  
Albany, N.Y. 12224

State University College  
The College Library  
Documents Librarian  
Potsdam, N.Y. 13676

State University College  
James M. Milne Library  
Geneseo, N.Y. 14454

State University College  
James M. Milne Library  
Assistant Librarian  
Oneonta, N.Y. 13820

**NEW YORK—Continued**

State University of New York  
Agricultural and Technical College  
Library-Periodical Department  
Alfred, N.Y. 14802

{ Syracuse University  
The Library  
Serials Division  
{ Syracuse, N.Y. 13210

United Nations  
Dag Hammarskjöld Library  
Acquisition Section  
New York, N.Y. 10017

**NORTH CAROLINA**

Duke University  
The Library  
Public Documents Division  
Durham, N.C. 27706

North Carolina State College  
D. H. Hill Library  
Raleigh, N.C. 27607

University of North Carolina  
The Library  
BA/SS Division—Documents  
Chapel Hill, N.C. 27515

**OHIO**

Bowling Green State University  
The Library  
Acquisitions Department  
Bowling Green, Ohio 43402

Kent State University  
The Library  
Documents Librarian  
Kent, Ohio 44240

Miami University  
The Library  
Documents Librarian  
Oxford, Ohio 45056

Oberlin College  
The Library  
Reference Librarian  
Reference Department  
Oberlin, Ohio 44074

Ohio State University  
The University Libraries  
Documents Division  
1858 Neil Avenue  
Columbus, Ohio 43210

**OHIO—Continued**

Ohio University  
The Library  
Documents Section  
Athens, Ohio 45701

**OKLAHOMA**

Central State College  
Max Chambers Library  
Government Publications  
Edmond, Okla. 73034

Oklahoma State Library  
Public Documents Division  
109 State Capitol  
Oklahoma City, Okla. 73105

Oklahoma State University  
The Library  
Documents Librarian  
Stillwater, Okla. 74075

**OREGON**

Oregon State Department of Education  
Division of Education Development  
302 Public Service Building  
Salem, Ore. 97310

University of Oregon  
The Library  
Documents Division  
Eugene, Ore. 97403

**PENNSYLVANIA**

American Institute for Research  
410 Amberson Avenue  
Pittsburgh, Pa. 15232

Carnegie Library of Pittsburgh  
Reference Department  
Pittsburgh, Pa. 15213

Community College of Philadelphia  
The Library  
34 South 11th Street  
Philadelphia, Pa. 19107

Free Library of Philadelphia  
Public Documents  
Philadelphia, Pa. 19103

Lehigh University  
The Library  
Bethlehem, Pa. 18015

Pennsylvania State Library  
Technical Services, Room 46  
Box 1601  
Harrisburg, Pa. 17126

**PENNSYLVANIA—Continued**

Pennsylvania State University  
The Library  
Documents  
University Park, Pa. 16802

**RHODE ISLAND**

Brown University  
The University Library  
Documents Division  
Providence, R.I. 02912

University of Rhode Island  
The Library  
Kingston, R.I. 02881

**TENNESSEE**

Joint University Libraries  
Serials and Documents  
Nashville, Tenn. 37203

University of Tennessee  
The Library  
Documents Librarian  
Knoxville, Tenn. 37916

**TEXAS**

Dallas Public Library  
Documents Librarian  
Dallas, Tex. 75201

Texas State Library  
U. S. Documents Section  
Drawer DD, Capital Station  
Austin, Tex. 78711

**UTAH**

Brigham Young University  
The Library  
Documents Section  
Provo, Utah 84601

Utah State University  
Libraries  
Documents Division  
Logan, Utah 84321

**UTAH—Continued**

University of Utah  
Library Periodical Room  
Salt Lake City, Utah 84112

**VIRGINIA**

University of Virginia  
Alderman Library  
Public Documents  
Charlottesville, Va. 22903

**WASHINGTON**

Washington State University  
Social Science Library  
Pullman, Wash. 99163

University of Washington  
The Library  
Documents Librarian  
Seattle, Wash. 98105

**WEST VIRGINIA**

West Virginia University  
The Library  
Reference Department  
Morgantown, W. Va. 26506

**WISCONSIN**

Milwaukee Public Library  
Acquisition Division  
814 West Wisconsin Avenue  
Milwaukee, Wis. 53233

University of Wisconsin—Milwaukee  
The Library  
2500 East Kenwood Boulevard  
Milwaukee, Wis. 53211

**WYOMING**

University of Wyoming  
The Library  
Documents Librarian  
Laramie, Wyo. 82071

*Field locations*

Copies of research reports may also be consulted at the following field locations:

John F. Kennedy Federal Office Building  
(BES and BLS)  
Government Center  
Boston, Mass. 02203

341 Ninth Avenue (BES and BLS)  
New York, N.Y. 10001

301 Professional Arts Building (BES)  
Chambersburg, Pa. 17201

1371 Peachtree Street NE. (BES and BLS)  
Atlanta, Ga. 30309

Engineers Building, Room 202 (BES)  
Cleveland, Ohio 44114

411 North Akard Street (BES)  
Dallas, Tex. 75201

334 Equitable Building (BES)  
17th and Stout Streets  
Denver, Colo. 80202

1240 East Ninth Street (BLS)  
Room 881  
Cleveland, Ohio 44199

U.S. Courthouse and Federal Office Building  
(BES and BLS)

219 South Dearborn Street  
Chicago, Ill. 60604

Federal Office Building (BES)

Room 2200  
911 Walnut Street  
Kansas City, Mo. 64106

450 Golden Gate Avenue (BES and BLS)

P.O. Box 36017  
San Francisco, Calif. 94102

Smith Tower Building (BES)

Room 1911  
Seattle, Wash. 98104

**APPENDIX B**

**GUIDELINES FOR SUBMISSION OF CONTRACT  
RESEARCH PROPOSALS UNDER THE MANPOWER  
DEVELOPMENT AND TRAINING ACT OF 1962,  
AS AMENDED**

## Appendix B

# GUIDELINES FOR SUBMISSION OF CONTRACT RESEARCH PROPOSALS

Title I of the Manpower Development and Training Act of 1962 (PL 87-415)<sup>1</sup> 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 this authority, the Department of Labor enters into contracts for the conduct of research by organizations and individuals outside the Department.

The Office of Manpower Policy, Evaluation, and Research (OMPER) has the responsibility for the conduct and coordination of research in the broad areas of manpower resources, requirements, development, utilization, mobility, and automation and technological change, for the purpose of providing information which will lead to the development of informed and responsive manpower policies and programs.

Academic institutions, State and local government organizations, and other organizations and individuals from all the social science disciplines with research capabilities in the manpower area may apply for contracts to conduct research.

*It is suggested that before a detailed research proposal is developed in accordance with the following guidelines, interested researchers should submit a brief summary of their ideas.* Preliminary submissions of research ideas 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 OMPER for the first time may also wish to submit background information concerning their staff, facilities, and capabilities for research.

Based on a review of a preliminary submission, OMPER may request that a formal research proposal be submitted. Thirty copies of the formal proposal should then be furnished in the form outlined in the guidelines. For all funded proposals, 225 reproduced copies of the final report resulting from the research will be required.

Publications based on the research conducted under the contract will acknowledge that the research was supported by a contract from the Office of Manpower Policy, Evaluation, and Research, Manpower Administration, U.S. Department of Labor, under the Manpower Development and Training Act of 1962. The Department will have a nonexclusive right to publish and distribute the final report of the research, and to use the findings including any research designs developed by the research for any purpose whatsoever.

<sup>1</sup> It is suggested that applicants study title I of the MDTA of 1962 before preparing proposals under these guidelines. (See p. 183.)



## GUIDELINES FOR SUBMISSION OF CONTRACT RESEARCH PROPOSALS UNDER THE MANPOWER DEVELOPMENT AND TRAINING ACT OF 1962, AS AMENDED

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 FOR FORMAL APPLICATION

#### 1. Proposal Submission

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

PROPOSAL SUBMITTED TO THE ASSOCIATE MANPOWER ADMINISTRATOR FOR POLICY, EVALUATION, AND RESEARCH, MANPOWER ADMINISTRATION, 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, P.L. 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:

Associate Manpower Administrator for Policy, Evaluation, and Research  
Manpower Administration  
U.S. Department of Labor  
Washington, D.C. 20210

## 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 an 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, 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**

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. Acknowledgement 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 Policy, Evaluation, and Research, Manpower Administration.

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 their 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

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 the 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.

### 7. Facilities

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

### 8. Duration

Estimate total time for the 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 the 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 12 months, 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 allowances for 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 Services), the cost 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 C

### GUIDELINES FOR SUBMISSION OF CONTRACT RESEARCH AND EVALUATION PROPOSALS UNDER THE ECONOMIC OPPORTUNITY ACT, TITLE I, PARTS B AND D AND TITLE II, SECTIONS 205(d) AND (e), AS AMENDED

## Appendix C

# GUIDELINES FOR SUBMISSION OF CONTRACT RESEARCH AND EVALUATION PROPOSALS UNDER THE ECONOMIC OPPORTUNITY ACT, TITLE I, PARTS B AND D AND TITLE II, SECTIONS 205(d) AND (e), AS AMENDED

Responsibility for the conduct of research and evaluation for four separate work-training and job creation programs authorized under the Economic Opportunity Act, as amended, is now vested in the Secretary of Labor by delegation from the Director, Office of Economic Opportunity. The first of these, the Neighborhood Youth Corps, was delegated to the Secretary upon enactment of the EOA in 1964. The remaining three are newly delegated programs and are addressed to the problems of work training and job creation.

The programs authorized by title I, parts B and D and title II, sections 205(d) and (e) are administered through the Bureau of Work Programs, which was created to bring together in one administrative element these four separate but closely related programs. Brief descriptions of the four operating programs follow:

### 1. TITLE I, PART B (Neighborhood Youth Corps)

This title authorizes (1) projects to provide part-time work-training experience for youth from low-income families who are in the ninth through 12th grades of school (or are of an age equivalent to that of students in such grades), and (2) projects to provide low-income unemployed youth useful work-training experience combined, where needed, with educational and training assistance, including basic literacy and occupational training. Enrollment shall be limited to youth, 14 to 21 years of age for in-school enrollees, and 16 to 21 for out-of-school enrollees.

### 2. TITLE I, PART D (Special Impact Program)

This program was authorized by the Congress in 1966. Its basic objective is to solve critical manpower problems existing in a defined urban community or neighborhood. It authorizes both public and private organizations to carry out its objectives. Projects under this part D serve as catalysts in structuring and coordinating projects authorized under this and other relevant programs. Part D projects also aim at improving employment prospects of neighborhood residents and the overall social and physical improvement of the neighborhood.

### 3. TITLE II, SECTION 205(d) (Operation Mainstream)

This program was authorized by the Congress in 1965. It permits



grants for projects (1) which involve activities directed to the needs of those chronically unemployed poor who have limited employment prospects and are unable, because of age and other reasons, to secure appropriate employment or training assistance under other programs; (2) which, in addition to other services provided, enable such persons to participate in projects for the betterment or beautification of the community or area served by the program, including activities which contribute to the management, conservation, or development of natural resources, recreational areas, Federal, State, and local government parks, highways, and other lands; and (3) which are conducted in accordance with standards adequate to assure application of those policies under the act designed for the protection of employed workers and for maintenance of basic rates of pay and other suitable conditions of employment.

#### 4. TITLE II, SECTION 205(e) (New Careers Program)

This program was authorized by the Congress in 1966. A major objective of this program is to contribute to and facilitate the process of designing and creating new career jobs in public service (either in the civil services or in private nonprofit agencies) as support or subprofessional personnel. It authorizes grants or contracts with any State or local agency or private organization to pay all or part of the costs of adult work-training employment programs, for unemployed or low-income persons, designed to improve the physical, social, economic, or cultural condition of the community or area served in fields including health, education, welfare, neighborhood redevelopment, and public safety.

The Office of Manpower Policy, Evaluation, and Research (OMPER), in cooperation with the Bureau of Work Programs (BWP), has the responsibility for the conduct and coordination of a program of research and evaluation studies in the areas covered by these programs for the purpose of providing information which will lead to improving their overall effectiveness.

Academic institutions, State and local government organizations, and other organizations and individuals from all the social science disciplines with research capabilities in the manpower area may apply for contracts to conduct research or evaluation projects.

*It is suggested that before a detailed research proposal is developed in accordance with the following guidelines, interested researcher should submit a brief informal summary of their ideas.* Preliminary submissions of research ideas 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 OMPER for the first time are encouraged to furnish background information concerning their staff, facilities, and capabilities for research.

Based on a joint review by OMPER and BWP of a preliminary submission, OMPER may request that a formal project proposal be submitted. Thirty copies of the formal proposal should then be furnished in the form outlined in the guidelines. For all funded proposals, 225 reproduced copies of the final report resulting from the research will be required.

Publications based on the research conducted under the contract will acknowl-

edge that the project was supported by a contract from the Office of Manpower Policy, Evaluation, and Research, Manpower Administration, U.S. Department of Labor, for the Bureau of Work Programs under the authority of the Economic Opportunity Act of 1964. The Department will have a nonexclusive right to publish and distribute the final report of the research, and to use the findings including any research designs developed by the research for any purpose whatsoever.

**GUIDELINES FOR SUBMISSION OF CONTRACT  
RESEARCH AND EVALUATION PROPOSALS  
UNDER THE ECONOMIC OPPORTUNITY ACT,  
TITLE I, PARTS B AND D AND TITLE II,  
SECTIONS 205(d) AND (e), AS AMENDED**

These instructions are in three parts:

- A. General instructions,
  - B. A specific outline to be used in describing the content and procedure of the project, including personnel and facilities, and
  - C. An outline for an estimated budget.
- There is *no printed* form to be used.

**A. GENERAL INSTRUCTIONS FOR FORMAL APPLICATION**

**I. Proposal Submission**

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

**PROPOSAL SUBMITTED TO THE ASSOCIATE MANPOWER ADMINISTRATOR FOR POLICY, EVALUATION, AND RESEARCH, MANPOWER ADMINISTRATION, U.S. DEPARTMENT OF LABOR, FOR THE CONDUCT OF A RESEARCH PROJECT UNDER THE PROVISIONS OF TITLE I PART B AND PART D AND TITLE II, SECTION 205(d) AND 205(e) OF THE ECONOMIC OPPORTUNITY ACT, P.L. 89-697.**

*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:

Associate Manpower Administrator for Policy, Evaluation, and Research  
Manpower Administration  
U.S. Department of Labor  
Washington, D.C. 20210

## 3. Scope and Substance of the Research or Evaluation 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) Proposed research should seek to develop new knowledge or new applications of existing knowledge which give promise of furthering the objectives of the Economic Opportunity Act programs cited below.

(2) Proposed evaluation projects should seek to measure the effectiveness of the following programs in meeting their objectives or to develop methods and techniques for measurement of program effectiveness.

#### (a) TITLE I, PART B (Neighborhood Youth Corps)

This program has three major components.

(1) The in-school program is designed to help youth from low-income families to stay in school by providing part-time work coupled with counseling and, when necessary, related remedial education and vocational training, with the objective of increasing the holding power of the schools.

(2) The out-of-school program is designed to meet the objective of increased employability for unemployed youth who are not in school, by providing the work experience, counseling, remedial education, and training that will result in improvement in motivation and work habits leading to vocational training or permanent employment.

(3) The summer program is designed to assist disadvantaged youth who cannot find employment during the vacation period, by encouraging them to maintain or resume their education, providing them with financial assistance, and enhancing their employment potential. Remedial education, counseling, and training are provided in addition to work experience, as required.

**(b) TITLE I, PART D (Special Impact Program)**

This program has the objective of mobilizing and integrating existing and planned resources related to employment, training, and job placement of neighborhood residents in a specifically defined geographic area. It is directed at assisting in arresting tendencies toward chronic unemployment, dependency, rising community tensions, and other related social problems of the community which bear on the employability of its residents.

**(c) TITLE II, SECTION 205(d) (Operation Mainstream)**

This program is designed to provide meaningful work experience and training for chronically unemployed poor persons who are at least 22 years of age and who have poor employment prospects in activities which will improve the social and physical environment of the community. It involves the unemployed and underemployed in activities which provide training for permanent jobs. It also requires the employing agency to provide permanent employment opportunities for, and to hire, those persons who receive work training and who qualify for such jobs.

**(d) TITLE II, SECTION 205(e) (New Careers Program)**

This demonstration program is a job creation effort with major emphasis on providing enrollees with access to new work careers. Projects under this program are authorized only in those communities where there is a realistic basis for assuming that local, State, and Federal agencies and other public service agencies operating in such communities will create and maintain permanent career positions after Federal support ends; where the project can be expected to have a major effect on the poor and the unemployed and upon the problems which bar such persons from access to dignified and meaningful employment; and, where it can be demonstrated that the disadvantaged poor can successfully prepare for new types of permanent jobs which will provide new or expanded public services in areas of public need.

(3) The project should be focused primarily on significant manpower problems related to these programs and should provide findings and conclusions of broad program interest.

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

**b. Research or Evaluation Design**

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

(2) The proposal should reflect an adequate knowledge of other studies or projects 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, 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**

Generally, initial formal 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 Policy, Evaluation, and Research, Manpower Administration.

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 their 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 particular Economic Opportunity Act program.

### **3. Objectives**

State the hypotheses to be tested, the specific questions to be answered, and in evaluation proposals the program elements to be assessed.

### **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 projects compared with previous studies and in what ways it may suggest new or contribute to more effective operation of existing programs.

### **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**

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 the 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.

### **7. Facilities**

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

### **8. Duration**

Estimate total time for the 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 the 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 12 months, 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, holidays, sick leave pay, and other employee benefits if customarily granted.

(3) Include allowances for 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 Services), the cost 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. If an overhead rate has been established by a government audit agency, identify the cognizant audit agency, the rate established, allocation base, and period for which established.

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 D

# GUIDELINES FOR APPLICATIONS FOR GRANTS IN SUPPORT OF DOCTORAL DISSERTATIONS

The guidelines which follow have been revised from those in previous issues.

## Appendix D

U.S. DEPARTMENT OF LABOR  
MANPOWER ADMINISTRATION  
Office of Manpower Policy,  
Evaluation, and Research

Budget Bureau No. 44-R1297  
Approval Expires Dec. 31, 1970  
DL-MT-241

# GUIDELINES FOR DOCTORAL DISSERTATION GRANTS UNDER THE MANPOWER DEVELOPMENT AND TRAINING ACT OF 1962, AS AMENDED<sup>1</sup>

Academic institutions offering doctoral degrees in areas of study which relate to the manpower field (such as economics, sociology, psychology, education, and the behavioral sciences generally) may apply for grants to support dissertation research of graduate students who have completed all requirements for the doctoral degree except the doctoral dissertation, or who will have met these requirements before the grant is effective. A separate application must be submitted for each candidate nominated by the university for a grant. Such a grant will be made to the university in the name of the candidate.

## GRANT CONDITIONS

The maximum amount of direct costs (see "The Application," paragraph 5.a below) of any one grant is \$10,000 for a period not to exceed 1 year. For projects scheduled to require more than 1 year, support may be given through renewals of grants for a total of not to exceed 3 years, subject to availability of appropriated funds, receipt of progress reports showing reasonable progress, and requests for such renewals to be submitted not later than 1 month before the expiration of previous grants. The initial grant will indicate the period for which the Department intends to support the project.

The grant may cover the following costs:

1. Support for the doctoral candidate.
  - a. Support will generally be on a stipend basis, determined by the proportion of time spent by the candidate on his dissertation times the following full-time annual stipend rates:

Single individual .....	\$4,000
Dependent allowances (additional)	
Dependent spouse .....	500
Dependent children: 1 .....	500
2 .....	800
3 (maximum) .....	1,100

<sup>1</sup> It is suggested that applicants study title I of the MDTA of 1962 before preparing proposals under these guidelines. (See p. 183.)

Under this schedule the maximum annual stipend rate for a married candidate with a dependent spouse and three or more dependent children is \$5,600. The following example illustrates how a stipend may be computed:

A married man with one child who teaches half time and works on his dissertation half time for 9 months of the year, and devotes full time to his dissertation the other 3 months could receive a stipend of \$3,125—three-fourths of the year at half time, \$1,875, plus one-fourth of the year at full time, \$1,250.

b. A candidate who has been regularly employed in teaching or research activities by the sponsoring university or a related research organization, and for whom the dissertation research requires relief from part or all of his employment, may be supported at his established rate of pay, prorated for the proportion of his time devoted to the dissertation.

2. Major direct project costs, such as clerical assistance, necessary travel, computer time and special supplies.
3. Indirect costs at a fixed rate not to exceed the established audited rate of the institution. The stipend may not be treated as a personnel cost for the purpose of computing the amount of indirect costs. However, the salary of a candidate employed by the University (as in 1. b above) will not be considered a stipend.
4. Allowance to sponsoring university.
  - a. When the candidate is on a stipend basis, and is not charged tuition or fees, an allowance of \$2,500 will be granted to the university in lieu of tuition, fees, general supplies and other administrative costs for grants of 6-months' to 1-year's duration. For grants of less than 6 months, the allowance will be \$1,250, except that for extensions or renewals of grants beyond the first year, the allowance will be prorated on a monthly basis.
  - b. When the candidate is employed by the University and paid a salary, no allowance will be granted. In such instances, the University may include the salary of the candidate in the base against which indirect costs rates may be applied.

In accordance with the Bureau of the Budget Circular No. A-74, dated December 13, 1965: "Participation in the costs of research supported by Federal grants," the grantee institution must share in the total cost of the project on "more than a token basis."

For applications which are approved, five copies of the final report resulting from the research will be required. For projects extending beyond 1 year, each renewal will be considered as a separate grant, and a progress report will be required with the request for renewal.

Any survey plans, surveys, or questionnaires arising from the research under an approved grant will be identified solely as the responsibility of the university or the doctoral candidate, and will in no way be attributed to the Department of Labor.

Publications based on the research conducted under the grant will acknowledge that the research was supported by a grant from the Office of Manpower Policy, Evaluation, and Research, Manpower Administration, of the U.S. Department of Labor under the Manpower Development and Training Act of 1962, as amended.

The standard conditions applying to all dissertation grants are appended as "Conditions Governing Grants in Support of Doctoral Dissertations" at the end of

these Guidelines. As indicated below, any desired exceptions from these conditions should be stated with the transmittal of the application.

## **SUBMISSION OF APPLICATIONS**

Fifteen copies of each application should be sent by the university to:

Associate Manpower Administrator for Policy, Evaluation, and Research  
Manpower Administration  
U.S. Department of Labor  
Washington, D.C. 20210

Closing dates for applications are January 1, April 1, July 1, and October 1. Applications will be accepted which are postmarked or delivered on or before each of these dates for work to be conducted or initiated during the 1-year period following the date of the application. However, applications received in MA 1 week or more after a closing date, regardless of postmark, will be considered at the next scheduled closing date. Processing of applications requires approximately 2 months, including evaluation by review panels. Applicants may expect to be notified of action taken about 2 months after the applicable closing date. Applications approved for funding may be activated for work to begin approximately 1 month after notification. A grant approved for a candidate who has not completed all the requirements for the doctoral degree at the date of the application will require notice from the university that all requirements have been met before any payments will be made under the grant.

## **CRITERIA FOR APPROVAL**

All applications are reviewed by a panel of persons from outside the Department with expertise in the manpower field. Only those applications which propose studies which have relevance to the objectives of title I of the Manpower Development and Training Act<sup>2</sup> are referred to the panel for their consideration and recommendation.

The panel considers all elements of an application in its review, giving primary emphasis to the candidate's ability, originality, and creativity as evidenced by the project proposal. The standing of the candidate and his proposed project relative to other candidates and to the availability of funds for the program determines whether the project will be approved for a grant. Approval may be conditional on acceptance of changes as recommended by the review panel, including substantive and budget revisions.

## **THE APPLICATION**

Applications should contain the information requested below in the order indicated. There is no printed form to be used.

1. The first page should show the following:

PROPOSAL SUBMITTED TO THE ASSOCIATE MANPOWER ADMINISTRATOR FOR POLICY, EVALUATION, AND RESEARCH, MANPOWER ADMINISTRATION, U.S. DEPARTMENT OF LABOR, FOR A GRANT IN SUPPORT OF A DOCTORAL DISSERTATION UNDER THE PROVISIONS OF TITLE I OF THE MANPOWER DEVELOPMENT AND TRAINING ACT, PL 87-415, AS AMENDED.

<sup>2</sup> It is suggested that applicants study title I of the MDTA of 1962 before preparing proposals under these guidelines. (See p. 183.)

*Submitted by:* (Legal name of university which will be used if grant is approved, and department sponsoring the candidate.)

*Address:* (Of university.)

*Candidate:* (Name, address, and phone number. Candidate should sign original or master copy.)

*Project title:* (Concise, descriptive, and as specific as possible.)

*Sponsor:* (Name, position, and phone number of university advisor or sponsor of the candidate. Sponsor should sign original or master copy.)

*Transmitted by:* (Name, position, and phone number of approving official. This should be someone with authority to commit the university, and he should sign the original or master copy. Unless otherwise indicated, all correspondence, including the Notice of Grant if approved, will be addressed to this official.)

*Date:* (Date transmitted.)

2. The background of the candidate. Include statement of education and employment experience, and a list of published work. Indicate if candidate has met all requirements other than the dissertation, and, if not, when these will be met.
3. A statement by the candidate's sponsor on the interests and potential of the candidate.
4. A brief, but reasonably complete, statement of the proposed work prepared by the candidate, and covering:
  - a. The problem to be investigated, and its importance and significance.
  - b. The objectives of the study, including hypotheses to be tested and specific questions to which answers will be sought.
  - c. Procedures to be used. Include, as appropriate, general design, population and sample to be studied, data to be gathered and methods to be used, and methods of analysis to be used.
  - d. A time schedule for the project and its major phases. This may extend beyond the 1-year limit on the initial grant as a basis for additional grants.
  - e. Where support of other agencies is necessary for the successful completion of the objectives of this study, include a statement of the extent of cooperation already assured by such agencies.
5. A budget statement, in detail for the current year, with tentative totals for additional years, if any. Detailed budgets will be required as part of each renewal application. Items to be shown in detailed budgets are listed below. Dollar amounts are to be listed in two columns: One, amounts of funds requested, and two, amounts of the grantee institution's contribution from non-Federal funds.
  - a. Direct Costs.
    - (1) Personal services. Show the portion of the candidate's time to be spent on the project, and the rate of stipend or salary.

- (I) If a stipend, indicate the basis for the rate used in accordance with schedule of stipends shown earlier in these guidelines.
  - (II) If a salary, indicate the basis for the recommended rate of pay.
  - (2) Major materials and special supplies required for the project. Itemize in broad categories and amounts.
  - (3) Travel, including subsistence at actual cost but not to exceed that allowable under the customary practice of the Grantee. Give detail of travel and subsistence, including types of transportation to be used and rates allowed therefore.
  - (4) Communication and services not included elsewhere. Itemize by broad categories and amounts. For computer use, show type, number, cost per hour, etc.
  - (5) Other direct costs. Itemize by category and amount.
- b. Indirect Costs. A fixed rate which does not exceed the grantee institution's established audited rate may be used. Identify the basis for the established rate—the date, audit agency, and reference numbers, if any.
  - c. Allowance to University. See page 154 above, numbered paragraph 4 for schedule of allowances. Include in amount requested.
6. A statement acknowledging that the Conditions Governing MDTA Grants in Support of Doctoral Dissertations (which follow) have been reviewed and will be accepted if the grant is approved. Any provisions from which the institution desires exception should be clearly indicated and justified.

# CONDITIONS GOVERNING GRANTS IN SUPPORT OF DOCTORAL DISSERTATIONS (PURSUANT TO U.S. CODE 2572)

The Grant is subject to the conditions listed below and any special conditions which may be attached.<sup>3</sup>

## 1. APPLICABILITY OF CONDITIONS

These conditions will be applicable to the Grantee, the Doctoral Candidate, and to any agency or organization which, pursuant to an agreement with the Grantee, undertakes responsibility for any part of the approved dissertation research project (hereinafter called "project").

## 2. AMOUNT OF GRANT

The amount of the Federal Grant shall not exceed the smaller of (1) the dollar amount shown in the Notice of Grant Award or (2) the amount of cash expenditures made by the Grantee for project purposes during the Grant Period. For this purpose, the amount of cash expenditures shall include only expenses which are chargeable to the budget of the Grantee and which are allowable costs under the applicable provisions of 1-15.3 of the Federal Procurement Regulations (41 CFR 1-15.3).

## 3. PAYMENTS

The Government will advance an amount equal to 90 percent of the total amount of the Grant. Within 90 days after the work under the Grant has been completed, Grantee shall submit a final fiscal report accounting for all expenditures under the Grant. Upon acceptance by the Office of Manpower Policy, Evaluation, and Research (OMPER) of this report, together with all reports required by these conditions, the Government will make final payment.

## 4. USE OF GRANT FUNDS

Grant funds shall be expended only for the purposes and activities of the project. Expenses which are attributable only in part to this project shall be prorated on a reasonable and consistent basis to determine the amount chargeable to the activities supported by this Grant.

## 5. CONFORMITY WITH BUDGET

Adjustments within the approved budget may be made by the Doctoral Candidate, with the approval of the Grantee, provided the total expenditures do not exceed the amount of the Grant and the stipend to be paid the Doctoral Candidate is not increased.

<sup>3</sup> Exceptions to these conditions should be requested in cases where compliance with one or more of them would cause unnecessary difficulties in carrying out the approved project. A waiver of any condition must be in writing and must be signed by an authorized representative of OMPER. Any such waiver must be explicit; no waiver may be inferred from the fact that the Grant is responsive to an application which may have contained material inconsistent with one or more of these conditions.



## **6. OBLIGATION OF GRANT FUNDS**

Grant funds may not be obligated prior to or after the Grant Period. Obligations outstanding as of the end of the Grant Period may be liquidated (paid out) after the end of the Grant Period. Such obligations shall involve only specific commitments for which a need existed in the Grant Period and which are supported by approved contracts, purchase orders or requisitions, invoices or bills, or other evidence of liability consistent with the Grantee's purchasing procedures, and for which the goods or services have been received or rendered within the Grant Period. All obligations incurred in a given Grant Period shall be liquidated within 3 calendar months after the end of the Grant Period.

## **7. UNOBLIGATED FUNDS**

Funds remaining unobligated at the end of the Grant Period cannot be transferred to another Grant. The amount of the free or unobligated balance remaining at the end of the Grant Period shall be returned to OMPER when the final financial report for the Grant Period is submitted. If savings occur in the liquidation of obligations outstanding at the end of the Grant Period, these become part of the unobligated balance.

## **8. TRAVEL EXPENSES**

Expenses charged for travel shall not exceed those allowable under the customary practice of the Grantee.

## **9. EXPENSES DISALLOWED**

No Grant funds shall be extended for:

- (a) the purchase of real property;
- (b) the purchase of personal property at prices exceeding \$250 per item, without prior written approval of OMPER;
- (c) the cost of meals for employees or officials of the Grantee except when in travel status;
- (d) costs incurred before or after the Grant Period; or
- (e) costs not allowable under the applicable provisions of subpart 1-15.3 of the Federal Procurement Regulations (41 CFR 1-15.3).

## **10. ACCOUNTING FOR PROPERTY**

Upon completion of the project, the Grantee will make a report to OMPER itemizing all nonconsumable property purchased with Grant funds. OMPER at that time will determine the disposition to be made of such property, except that title to property acquired with Grant funds which cost \$250 per item or less shall vest in the Grantee.

## **11. REVOCATION**

The Associate Manpower Administrator for Policy, Evaluation, and Research may revoke this grant in whole or in part for cause. Cause shall include the following: (1) improper use of Grant funds, (2) failure by the Grantee or the Doctoral Candidate to comply with either these conditions or the terms of the project proposal, (3) submittal by the Grantee to OMPER of reports which are incorrect or incomplete

in any material respect, or (4) inability of the Doctoral Candidate to continue to work on the project. In the event of revocation of this Grant, the Grantee shall cancel its outstanding commitments hereunder covering the procurement of material, supplies, equipment, and miscellaneous items, and shall submit a report covering the activities, findings, and, if any, the conclusions and recommendations resulting from the project work to the date of revocation. In addition, the Grantee shall exercise all reasonable diligence to accomplish the cancellation or diversion of its outstanding commitments covering personal services and extending beyond the date of such revocation. Finally, the Grantee shall refund to OMPER any unexpended Grant funds, except that revocation shall not affect any amount obligated by the Grantee prior to receiving notice of the revocation.

## **12. INTEREST EARNED ON FEDERAL FUNDS**

All interest earned on Federal funds shall be reported on the financial report for the Grant Period and shall be returned by check payable to the U.S. Treasury.

## **13. REPORTS**

Prior to the end of the Grant Period, Grantee will submit a final report, including five (5) copies of the Dissertation, covering the activities, implications, conclusions, and recommendations resulting from the project work. Said final report and Dissertation shall contain, either in the preface or on the title page, the following acknowledgement:

“The material in this project was prepared under a Grant from the Office of Manpower Policy, Evaluation, and Research, U.S. Department of Labor, under the authority of Title I of the Manpower Development and Training Act of 1962. Researchers undertaking such projects under Government sponsorship are encouraged to express freely their professional judgment. Therefore, points of view or opinions stated in this document do not necessarily represent the official position or policy of the Department of Labor.”

## **14. RIGHTS TO AND DISPOSITION OF DATA**

The Grantee or the Doctoral Candidate may publish results of the project without prior review by OMPER, provided that such publications acknowledge (a) that the project was supported by a grant from the Office of Manpower Policy, Evaluation, and Research of the Manpower Administration of the U.S. Department of Labor pursuant to the provisions of the Manpower Development and Training Act of 1962, and (b) that “Reproduction in whole or in part is permitted for any purpose of the United States Government.” Grantee agrees to furnish five copies of each such publication to OMPER. The Government may, to the extent that the Grantee has the power to grant such rights, duplicate, use, and disclose in any manner and for any purpose whatsoever, and have others so do, all data procured or reports delivered under this Grant. It is understood that the Grantee has no right to disclose material of a confidential nature to the Government even though such material has been collected in the performance of this Grant. If the Grant results in a book or other copyrightable material, the author is free to copyright the work, but OMPER reserves a royalty-free, nonexclusive, and irrevocable license to reproduce, publish or otherwise use, and to authorize others to use, all copyrighted material and all material which can be copyrighted resulting from this Grant. It is further agreed that in any material prepared under this Grant under which a license is reserved to the Government under the preceding sentence, the following language shall be added plainly in

the vicinity of the copyright: "Reproduction by the United States Government in whole or in part is permitted for any purpose."

#### **15. RECORDS AND ACCOUNTS**

The Grantee shall maintain such records and accounts, including property, personnel, financial records and equal opportunity, as may be required by the Director of OMPER to assure a proper accounting for all Grant funds. Grantee shall keep records which shall reflect its actual contribution to the project, and, as required by the Bureau of the Budget Circular A-74 (12/13/65), it shall not be less in proportion to the total actual charges against the Grant than the ratio indicated in the approved budget. Grantee agrees to make available, for audit purposes, all records required under this clause to OMPER or the Comptroller General of the United States or his authorized representative, and to retain them for 3 years after the expiration of the Grant, unless permission to destroy them is granted by the Director of OMPER. If requested by the Government, the Grantee will furnish the Director of OMPER prior to the receipt of any Federal funds, an opinion of a Certified Public Accountant indicating that the Grantee has an accounting system which is adequate for the purposes of this Grant.

#### **16. COVENANT AGAINST CONTINGENT FEES**

The Grantee warrants that no person or selling agency or other organization has been employed or retained to solicit or secure this Grant upon an agreement or understanding for a commission, percentage, brokerage, or contingent fee. For breach or violation of this warrant the Government shall have the right to revoke this Grant without liability, or, in its discretion, to deduct from the award or otherwise recover, the full amount of such commission, percentage, brokerage or contingent fee.

#### **17. OFFICIALS NOT TO BENEFIT**

No member of or delegate to Congress, or resident commissioner, shall be admitted to any share or part of this Grant, or to any benefit that may arise therefrom; but this provision shall not be construed to extend to this Grant if made with a corporation for its general benefit.

#### **18. OTHER GOVERNMENT FUNDS**

The Grantee represents that no funds other than those awarded under this Grant have been received from the Federal Government in payment for any of the activities financed by funds awarded under this Grant. If any such funds are hereafter received, the Grantee agrees to disclose the fact and return them to the Government.

#### **19. DISCLAIMER OF LIABILITY**

The project supported by this Grant is that of the Grantee and not the Federal Government, which assumes no liability with respect to accidents, illnesses, or claims arising out of the Grant. Accordingly, the Grantee is advised to take such steps to insure or protect itself as it may deem desirable.

#### **20. QUESTIONNAIRE APPROVAL**

No questionnaire or survey plan shall be identified as a government study or government approved study unless the Grantee submits to the Director of OMPER copies

of said questionnaires and survey plans for clearance in advance of use in accordance with the Federal Reports Act of 1942.

## **21. EQUAL OPPORTUNITY**

This Grant is subject to title VI of the Civil Rights Act of 1964 (78 Stat. 252) and the regulations of the Secretary of Labor issued thereunder which are found at 29 Code of Federal Regulations, Part 31. Grantee assures that no person shall, on the grounds of race, color, or national origin, be excluded from participation in, be denied the proceeds of, or be subject to discrimination under the project supported by this Grant. During the period of this Grant the Grantee assures that neither it nor any other employer performing work under the Grant will discriminate against any employer or applicant for employment because of race, creed, color, or national origin, and will take affirmative action to ensure that applicants are employed, and that employees are treated during employment without regard to their race, creed, color, or national origin. Such action shall include, but not be limited to the following: employment, upgrading, demotion, or transfer; recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. For breach or violation of this assurance, the Government shall have the right to revoke this grant without liability, or, in its discretion, seek its judicial enforcement.

## **22. POLITICAL ACTIVITY**

No funds provided hereunder shall be used for any partisan political activity or to further the election or defeat of any candidate for public office and no part of the administration of the program authorized by this contract shall be intermingled with or closely affiliated with any partisan political activity. In addition, it should be noted that employees or public bodies and community action agencies may be subject to limitations on their political activities under the Hatch Act [5 U.S.C. 118k (a), 18 U.S.C. 595].

## **APPENDIX E**

# **GUIDELINES FOR APPLICATIONS FOR GRANTS IN SUPPORT OF RESEARCH PROJECTS**

**The guidelines which follow have been revised from those in previous issues.**

## Appendix E

U.S. DEPARTMENT OF LABOR  
MANPOWER ADMINISTRATION  
Office of Manpower Policy,  
Evaluation, and Research

Budget Bureau No. 44-R1296  
Approval Expires Dec. 31, 1970  
DL-MT-242

# GUIDELINES FOR RESEARCH GRANTS UNDER THE MANPOWER DEVELOPMENT AND TRAINING ACT OF 1962, AS AMENDED<sup>1</sup>

Public and private nonprofit academic institutions and research organizations, and individual researchers associated with such institutions or organizations, may apply for grants to support research projects or research-related activities in the manpower field.

Projects approvable under this program include:

1. Research which explores new fields of inquiry.
2. Research which explores new methods of approach to existing fields of inquiry.
3. Studies which test the effectiveness or feasibility of research projects or programs.
4. Syntheses of the current state of knowledge in various research areas in order to provide guides for future programs.

In addition, grants may be made in special circumstances to assist the support of research projects underwritten by other agencies, but which require additional monies to assure completion.

### GRANT CONDITIONS

The maximum amount of direct cost (see "The Application," paragraph 10.a. below) of any one grant is \$15,000 for a period not to exceed 1 year. For projects scheduled for more than 1 year, additional grants, each within the same limitation, may be made for a total of not to exceed 3 years, subject to availability of appropriated funds, receipt of progress reports showing reasonable progress, and requests for such renewals to be submitted not later than 1 month before the expiration of previous grants. The initial grant will indicate the period for which the Department intends to support the project.

Grant funds may be expended only for the purpose of carrying out the research program as approved. In accordance with the Bureau of the Budget Circular No.

<sup>1</sup> It is suggested that applicants study title I of the MDTA of 1962 before preparing proposals under these guidelines. (See p. 183.)

A-74 dated December 13, 1965, "Participation in the costs of research supported by Federal grants," the grantee institution must share in the total cost of the project on "more than a token basis."

All grant awards are subject to the condition that the principal investigator designated in the application continues to be responsible for the conduct of the approved project for its duration. Continuation of grants in the event the principal investigator becomes unavailable will be contingent upon written approval by the Department of the person chosen by the grantee to replace the principal investigator.

For applications which are approved, five reproduced copies of the final report resulting from the research will be required. For projects extending beyond 1 year, each renewal will be considered as a separate grant, and a progress report will be required with the request for renewal.

Any survey plans, surveys, or questionnaires arising from the research under an approved grant will be identified solely as the responsibility of the grantee, and will in no way be attributed to the Department of Labor.

Publications based on the research conducted under the grant will acknowledge that the research was supported by a grant from the Office of Manpower Policy, Evaluation, and Research, Manpower Administration, of the U.S. Department of Labor under the Manpower Development and Training Act of 1962, as amended. The Department will have a nonexclusive right to publish and distribute the final report of the research, and to use the findings, including any research designs developed by the research, for any purpose whatsoever.

The standard conditions applying to all research grants are appended as "Conditions Governing Grants in Support of Research Projects," at the end of these Guidelines. As indicated below, any desired exceptions from these conditions should be stated with the transmittal of the application.

## **CRITERIA FOR APPROVAL**

A primary consideration in the approval of any grant request is the relevance of the area of study to the objectives of title I of the Manpower Development and Training Act.<sup>2</sup> Proposals which are determined to be relevant to the objectives of the Manpower Development and Training Act will be considered by a review panel of persons from outside the Department with expertise in the manpower field and approved or disapproved in relation to criteria such as the following:

1. Manpower Significance
  - a. The project is focused primarily on significant manpower problems.
  - b. The anticipated results or methodology of the project have broad national interest. Projects limited to special areas provide a basis for generalized conclusions, or have application over a wide area.
2. Research Design
  - a. The problem with which the research proposes to deal is clearly defined.
  - b. The proposal reflects an adequate knowledge of other research related to the problem.
  - c. Questions to be answered or hypotheses to be tested are well formulated and clearly stated.
  - d. The proposal outlines fully the procedures to be followed, and wherever applicable, includes information on such matters as sampling procedures including the size of the population to be studied and the

<sup>2</sup> It is suggested that applicants study title I of the MDTA of 1962 before preparing proposals under these guidelines. (See p. 183.)

size of sample and control groups, as well as types of data to be gathered, and statistical analysis to be made.

3. Personnel and Facilities

a. The experience and training of the principal investigator appear adequate to carry out the research.

b. The facilities available to the investigator(s) are adequate to carry out the research.

c. The plan provides, wherever feasible, for encouraging and increasing knowledge and skills of professional personnel and of new research workers.

4. Economic Efficiency

a. The suggested approach to the problem is reasonable in terms of overall cost as compared with the cost of other possible approaches.

b. The suggested approach to problems involving the analysis of statistical data utilizes, to the extent feasible, data already available or being collected through Government and other sources.

c. The total proposed expenditure is justifiable in terms of the probable value of the results of the proposed research, and the grantee institution is contributing a reasonable share of the total cost.

Approval may be conditional on acceptance of changes in the project or the budget, or both, as recommended by the review panel.

### GRANT REVISIONS

The terms of any approved grant will be revised only if major changes in the areas to be investigated are agreed to be necessary. Changes in the research approach suggested by the development of a project or to expedite the achievement of its objectives, but which do not materially change the scope and purpose of the study, may be made at the discretion of the grantee. Adjustments within the estimated approved budget may be made at the discretion of the grantee if the total amount of the grant and the total pay and rate of pay of the principal investigator(s) are not increased.

Prior written approval of the Department is required for:

1. Substantial changes in the scope or purpose of a study, with or without changes in the budget;
2. Any increase in the total budget for a grant;
3. Any increase in the total pay or rate of pay of the principal investigator(s); or
4. Any change in the Grant Period.

### SUBMISSION OF APPLICATIONS

Fifteen copies of each application should be sent to:

Associate Manpower Administrator for Policy, Evaluation, and Research  
Manpower Administration  
U.S. Department of Labor  
Washington, D.C. 20210

Closing dates for applications are January 1, April 1, July 1, and October 1. Applications will be accepted which are postmarked or delivered on or before each of these dates for work scheduled to start 3 months or more following the applicable closing date. However, applications received 1 week or more after a closing date, regardless of postmark, will be considered at the next scheduled closing date. Processing of applications requires approximately 2 months, including evaluation by review



panels. Applicants may expect to be notified of action taken about 2 months after the closing date. Applications approved for funding may be activated for work to begin approximately 1 month after notification.

## THE APPLICATION

Applications should contain the information requested in the order indicated. There is no printed form to be used.

1. The first page should show the following:

PROPOSAL SUBMITTED TO THE ASSOCIATE MANPOWER ADMINISTRATOR FOR POLICY, EVALUATION, AND RESEARCH, MANPOWER ADMINISTRATION, U.S. DEPARTMENT OF LABOR, FOR A GRANT IN SUPPORT OF A RESEARCH PROJECT UNDER THE PROVISIONS OF TITLE I OF THE MANPOWER DEVELOPMENT AND TRAINING ACT, P.L. 87-415, AS AMENDED.

*Project title:* (Be concise, descriptive, and as specific as possible. Include key words under which project may be indexed.)

*Submitted by:* (Legal name of institution or organization which will be used if grant is approved, hereinafter referred to as "organization.")

*Address:* (Of organization.)

*Telephone number:* (Of organization. Include area code.)

*Principal*

*Investigator:* (Name, position, and phone number of the principal investigator.)

*Transmitted by:* (Name, position, and phone number of official who is approving the submission of the proposal. This must be someone with authority to commit the organization to the proposed project. Unless otherwise indicated, all correspondence, including the Notice of Grant, if approved, will be addressed to this official.)

(The proposal should be signed by both the principal investigator and the transmitter on the original or master copy.)

*Date:* (Date transmitted.)

2. Abstract. On a single separate page submit a summary of the proposal including (a) Title of project, (b) Name of organization, (c) Name of principal investigator, (d) Objectives, (e) Procedures, (f) Time schedule, i.e., beginning and ending dates (first year total and project total if longer than 1 year).

3. **Problem.** Give a brief statement of the problem to be investigated, explaining its importance and significance.
4. **Objectives.** State the objectives of the research project, including hypotheses to be tested and specific questions to which answers will be sought. For research design studies, include the ultimate objectives of the research to be designed.
5. **Relationship to other research.** Cite or summarize pertinent research related to the proposed study. Present the rationale upon which the proposal is based. Indicate the uniqueness of the proposal.
6. **Procedure.** Describe the procedure in detail listing the steps to be followed. Include specific information on each of the following, as appropriate:
  - a. General design of project.
  - b. Population and sample to be studied.
  - c. Data to be gathered and methods to be used.
  - d. Methods of analysis to be used.
  - e. Time schedule indicating length of time required for each major phase of study.
7. **Personnel.** Give name, title, and a brief statement of the research experience of the principal investigator, and of other key personnel.
8. **Facilities.** Indicate special facilities and similar advantages, including research staff resources, available to the organization.
9. **Other information.** Indicate other information pertinent to the proposal, including the following:
  - a. Amount of financial or other support for this project from other sources.
  - b. Whether this proposal has been or will be submitted to any other agency or organization for financial support.
  - c. Whether this proposal is an extension of or an addition to a previous project supported by the Department of Labor or other Government agency.
  - d. Whether this proposal or a similar one was previously submitted to the Department of Labor or other Government agency.
  - e. Extent to which cooperation has been agreed to by agencies whose support is necessary for the successful completion of the objectives of the proposal.
10. **Budget.** Include a section on estimated costs of the project to be covered by the grant and by the grantee institution from non-Federal sources. Start this section on a new page.

The cost of the project includes the costs of necessary direct items of expenditures incurred in its performance; it may also include an amount of overhead or indirect costs at a rate which does not exceed the grantee institution's established audited rate for such projects.

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 in two columns: One, amount of funds requested, and two, amounts of the grantee institution's contribution from non-Federal funds. If the project is expected to extend beyond 1 year, indicate amounts required for each year and in total.

a. Direct Costs.

(1) Personal Services. Include:

(a) Salaries<sup>3</sup> and wages of all personnel which are directly attributable to actual performance under this grant, whether on a full- or part-time basis. (List personnel by title, man-months, and dollar amounts.)

(b) In connection with the above, but identify separately, allowances for vacation, holiday, and sick leave pay. Also include employee benefits to extent customarily provided by organization.

(c) Consultants<sup>3</sup> as required.

(2) Materials and Supplies. Itemize in broad categories and amounts all materials and supplies which are to be directly expended in performance of the project.

(3) Travel. Include subsistence during travel at actual cost, but not to exceed that allowable under the customary practices of the Grantee. Give detail of travel and subsistence, including types of transportation and rates allowed therefore.

(4) Communications. Include telephone and telegraph charges unless these are included in direct costs.

(5) Services. Include those not specifically covered under personal services. Itemize by category and amount.

(6) Other. Itemize by category and amount. For computer use, show type, number, cost per hour, etc.

b. Indirect Costs or Overhead.

A fixed rate which does not exceed the grantee institution's established audited rate may be used. Identify the basis for the established rate—date, audit agency, and reference numbers, if any. The proposed budget will be reviewed against applicable Federal regulations, such as Bureau of the Budget Circular No. A-21, as part of the review of the proposal. Where changes are necessary for the projects which are otherwise approved, final approval will be conditional on the acceptance of these changes.

11. A statement acknowledging that the Conditions Governing Grants in Support of Research Projects (which follow) have been reviewed and will be accepted if the grant is approved. If there are any provisions from which the organization desires exception, these should be clearly indicated and justified.

<sup>3</sup> For salaries at rates of \$15,000 or more per annum and for consultant fees in excess of \$75 per day, include a statement establishing that each such rate is in accordance with the established compensation rates and policies of the grantee institution.

**CONDITIONS GOVERNING GRANTS IN SUPPORT OF  
RESEARCH PROJECTS UNDER SECTION 102(5)  
OF THE MANPOWER DEVELOPMENT AND  
TRAINING ACT OF 1962  
(42 U.S. CODE 2572)**

The Grant is subject to the conditions listed below and any special conditions which may be attached.\*

**1. APPLICABILITY OF CONDITIONS**

These conditions will be applicable to the Grantee, and to any agency or organization which, pursuant to a contract agreement, or other arrangement with the Grantee, undertakes responsibility for any part of the approved research project (hereinafter called "project").

**2. AMOUNT OF GRANT**

The amount of the Federal Grant shall not exceed the smaller of (1) the "total amount of this grant" shown in the Notice of Grant Award or (2) the amount of cash expenditures made by the Grantee for project purposes during the Grant Period. For this purpose, the amount of cash expenditures shall include only expenses which are chargeable to the budget of the Grantee (other than Grantee contributions) and which are allowable costs under the applicable provisions of subpart 1-15.3 of the Federal Procurement Regulations (41 CFR 1-15.3).

**3. PAYMENTS**

The Government will advance an amount equal to 90 percent of the total amount of the Grant. Within 90 days after the work under the Grant has been completed, Grantee shall submit a final fiscal report accounting for all expenditures under the Grant. Upon acceptance by the Office of Manpower Policy, Evaluation, and Research (OMPER) of this report, together with all other reports required by these conditions, the Government will make final payment.

**4. USE OF GRANT FUNDS**

Grant funds shall be expended only for the purposes and activities of the project. Expenses which are attributable only in part to this project shall be prorated on a reasonable and consistent basis to determine the amount chargeable to the activities supported by this Grant.

**5. CONFORMITY WITH BUDGET**

Adjustments within the approved budget may be made by the Grantee, provided the total expenditures do not exceed the amount of the Grant and the total pay and rate of pay of the principal investigator are not increased.

\* Exceptions to these conditions should be requested in cases where compliance with one or more of them would cause unnecessary difficulties in carrying out the approved project. A waiver of any condition must be in writing and must be signed by an authorized representative of OMPER. Any such waiver must be explicit; no waiver may be inferred from the fact that the Grant is responsive to an application which may have contained material inconsistent with one or more of these conditions.

## **6. OBLIGATION OF GRANT FUNDS**

Grant funds may not be obligated prior to or after the Grant Period. Obligations outstanding as of the end of the Grant Period may be liquidated (paid out) after the end of the Grant Period. Such obligations shall involve only specific commitments for which a need existed in the Grant Period and which are supported by approved contracts, purchase orders or requisitions, invoices, or bills, or other evidence of liability consistent with the Grantee's purchasing procedures, and for which the goods or services have been received or rendered within the Grant Period. All obligations incurred in the Grant Period shall be liquidated within 3 calendar months after the end of the Grant Period.

## **7. UNOBLIGATED FUNDS**

Funds remaining unobligated at the end of a Grant Period cannot be transferred to another grant. The amount of the free or unobligated balance remaining at the end of the Grant Period shall be returned to OMPER when the final financial report for the Grant Period is submitted. If savings occur in the liquidation of obligations outstanding at the end of the Grant Period, these become part of the unobligated balance.

## **8. TRAVEL EXPENSES**

Expenses charged for travel shall be governed by the following: (1) local travel by public carrier at actual costs, by privately owned automobile at the Grantee's usual rate but not to exceed standard Government limitations plus parking fees; (2) out-of-town travel at the actual costs of first-class rail or coach air fare, plus actual costs of subsistence but not to exceed those allowable under the customary practice of the Grantee.

## **9. EXPENSES DISALLOWED**

No Grant funds shall be expended for:

- (a) the purchase of real property;
- (b) the purchase of personal property at prices exceeding \$250 per item, without prior written approval of OMPER;
- (c) the cost of meals for employees or officials of the Grantee, except when in travel status;
- (d) costs incurred before or after the Grant Period; or
- (e) costs not allowable under the applicable provisions of subpart 1-15.3 of the Federal Procurement Regulations (41 CFR 1-15.3).

## **10. ACCOUNTING FOR PROPERTY**

Upon completion of the project, the Grantee will make a report to OMPER itemizing all nonconsumable property purchased with Grant funds. OMPER at that time will determine the disposition to be made of such property, except that title to property acquired with Grant funds which costs \$250 per item or less shall vest in the Grantee.

## **11. REVOCATION**

The Associate Manpower Administrator for Policy, Evaluation, and Research may revoke this Grant in whole or in part for cause. Cause shall include the following:

(1) improper use of Grants funds, (2) failure by the Grantee to comply with either these conditions or the terms of the project proposal, (3) submittal by the Grantee to OMPER of reports which are incorrect or incomplete in any material respect, or (4) inability or unwillingness of the principal investigator to continue work on the project. The Director of OMPER may also revoke this Grant if the Grantee should find itself unable or unwilling to accept upon notification by the Government any additional conditions that may be provided by law or by Executive Order. In the event of revocation of this Grant, the Grantee shall cancel its outstanding commitments hereunder covering the procurement of materials, supplies, equipment, and miscellaneous items, and shall submit a report covering the activities, findings, and, if any, the conclusions and recommendations resulting from the project work to the date of revocation. In addition, the Grantee shall exercise all reasonable diligence to accomplish the cancellation or diversion of its outstanding commitments covering personal services and extending beyond the date of such revocation. Finally, the Grantee shall refund to OMPER any unexpended Grant funds, except that revocation shall not affect any amount obligated by the Grantee prior to receiving notice of the revocation.

## **12. INTEREST EARNED ON FEDERAL FUNDS**

All interest earned on Federal Grant funds shall be reported on the financial report for the Grant Period and shall be returned by check payable to the U.S. Treasury.

## **13. REPORTS**

Prior to the end of the Grant Period, Grantee shall submit five copies of a final research report covering the activities, research findings, implications, conclusions, and recommendations resulting from the project work. Said final report shall contain, either in the preface or on the title page, the following acknowledgement:

"The material in this project was prepared under a Grant from the Office of Manpower Policy, Evaluation, and Research, U.S. Department of Labor, under the authority of title I of the Manpower Development and Training Act of 1962. Researchers undertaking such projects under Government sponsorship are encouraged to express freely their professional judgment. Therefore, points of view or opinions stated in this document do not necessarily represent the official position or policy of the Department of Labor."

## **14. RIGHTS TO AND DISPOSITION OF DATA**

The Grantee may publish results of the project without prior review by OMPER, provided that such publications acknowledge (a) that the project was supported by a Grant from the Office of Manpower Policy, Evaluation, and Research of the Manpower Administration of the U.S. Department of Labor, pursuant to the provisions of the Manpower Development and Training Act of 1962, and (b) that reproduction by the United States Government in whole or in part is permitted for any purpose. Grantee agrees to furnish five copies of each such publication to OMPER. The Government may, to the extent that the Grantee has the power to grant such rights, duplicate, use, and disclose in any manner and for any purpose whatsoever, and have others so do, all data procured or reports delivered under this Grant. It is understood that the Grantee has no right to disclose material of a confidential nature to the Government even though such material has been collected in the performance of this Grant. If the Grant results in a book or other copyrightable material, the author is free to copyright the work, but OMPER reserves a royalty-free, nonexclusive, and

irrevocable license to reproduce, publish or otherwise use, and to authorize others to use, all copyrighted material and all material which can be copyrighted resulting from this Grant. It is further agreed that in any material prepared under this Grant under which a license is reserved to the Government under the preceding sentence, the following language shall be added plainly in the vicinity of the copyright: "Reproduction by the United States Government in whole or in part is permitted for any purpose."

#### **15. RECORDS AND ACCOUNTS**

The Grantee shall maintain such records and accounts, including property, personnel, financial records and equal opportunity, as may be required by the Director of OMPER to assure a proper accounting for all Grant funds. Grantee shall keep records which shall reflect its actual contribution to the project, and as required by the Bureau of the Budget Circular A-74 (12/13/65), it shall not be less in proportion to the total actual charges against the Grant than the ratio indicated in the approved Budget. Grantee agrees to make available, for audit purposes, all records required under this clause to OMPER or the Comptroller General of the United States or his authorized representative, and to retain them for 3 years after the expiration of this Grant, unless permission to destroy them is granted by the Director of OMPER. If requested by the Government, the Grantee will furnish the Director of OMPER prior to the receipt of any Federal funds, an opinion of a Certified Public Accountant indicating that the Grantee has an accounting system which is adequate for the purposes of this Grant.

#### **16. COVENANT AGAINST CONTINGENT FEES**

The Grantee warrants that no person or selling agency or other organization has been employed or retained to solicit or secure this Grant upon an agreement or understanding for a commission, percentage, brokerage, or contingent fee. For breach or violation of this warrant, the Government shall have the right to revoke this Grant without liability or, in its discretion, to deduct from the award, or otherwise recover, the full amount of such commission, percentage, brokerage, or contingent fee.

#### **17. OFFICIALS NOT TO BENEFIT**

No member of or delegate to Congress, or resident commissioner, shall be admitted to any share or part of this Grant, or to any benefit that may arise therefrom; but this provision shall not be construed to extend to this Grant if made with a corporation for its general benefit.

#### **18. GRATUITIES**

The Government, may, by written notice to the Grantee, revoke this Grant if it is found, after notice and hearing, by the Secretary or his duly authorized representative, that gratuities (in the form of entertainment, gifts, or otherwise) were offered or given by the Grantee, or any agent or representative of the Grantee, to any officer or employee of the Government with a view toward securing this Grant: PROVIDED, that the existence of the facts upon which the Secretary or his duly authorized representative makes such findings shall be in issue and may be reviewed in any competent court.

## **19. OTHER GOVERNMENT FUNDS**

The Grantee represents that no funds other than those awarded under this Grant have been received from the Federal Government in payment for any of the activities financed by funds awarded under this Grant. If any such funds are hereafter received, the Grantee agrees to disclose the fact and return them to the Government.

## **20. DISCLAIMER OF LIABILITY**

The project supported by this Grant is that of the Grantee and not the Federal Government which assumes no liability with respect to accidents, illnesses, or claims arising out of the Grant. Accordingly, the Grantee is advised to take such steps to insure or protect itself as it may deem desirable.

## **21. QUESTIONNAIRE APPROVAL**

No questionnaire or survey plan shall be identified as a Government study or Government approved study unless the Grantee submits to the Director of OMPER copies of said questionnaires and survey plans for clearance in advance of use in accordance with the Federal Reports Act of 1942.

## **22. EQUAL OPPORTUNITY**

During its conduct of this project, the Grantee agrees as follows:

(1) The Grantee will not discriminate against any employee or applicant for employment because of race, creed, color, or national origin. The Grantee will take affirmative action to ensure that applicants are employed, and that employees are treated during employment without regard to their race, creed, color, or national origin. Such action shall include, but not be limited to the following: employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. The Grantee agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided by OMPER setting forth the provisions of this nondiscrimination clause.

(2) The Grantee will, in all solicitations or advertisements for employees placed by or in behalf of the Grantee, state that all qualified applicants will receive consideration for employment without regard to race, creed, color, or national origin.

(3) The Grantee will send to each labor union or representative of workers with which he has a collective-bargaining agreement or other contract or understanding a notice, to be provided by OMPER, advising the labor union or workers' representative of the Grantee's commitments under Section 202 of Executive Order 11246 of September 24, 1965, and shall post copies of the notice in conspicuous places available to employees and applicants for employment.

(4) The Grantee will comply with all provisions of Executive Order No. 11246 of September 24, 1965, and of the rules, regulations, and relevant orders of the Secretary of Labor, U.S. Department of Labor (hereinafter called "Secretary").

(5) The Grantee will furnish all information and reports required by Executive Order No. 11246 of September 24, 1965, and by the rules, regulations,



and orders of the Secretary, or pursuant thereto, and will permit access to his books, records, and accounts by OMPER and the Secretary for purposes of investigation to ascertain compliance with such rules, regulations, and orders.

(6) In the event of the Grantee's noncompliance with the nondiscrimination clauses of this contract or with any of such rules, regulations, or orders, this Grant may be revoked in whole or in part and the Grantee may be declared ineligible for further Government contracts or grants in accordance with procedures authorized in Executive Order No. 11246 of September 24, 1965, and such other sanctions may be imposed and remedies involved as provided in Executive Order No. 11246 of September 24, 1965, or by rule, regulation, or order of the Secretary, or as otherwise provided by law.

(7) The Grantee will include the provisions of paragraphs (1) through (7) in every subcontract or purchase order unless exempted by rules, regulations, or orders of the Secretary issued pursuant to Section 204 of Executive Order No. 11246 of September 24, 1965, so that such provisions will be binding upon each subcontractor or vendor. The Grantee will take such action with respect to any subcontract or purchase order as the Department of Labor may direct as a means of enforcing such provisions including sanctions for noncompliance: *Provided, however,* that in the event the Grantee becomes involved in, or is threatened with, litigation with a subcontractor or vendor as a result of such direction by the Department of Labor, the Grantee may request the United States to enter into such litigation to protect the interests of the United States.

### **23. GOVERNMENT PROPERTY**

Title to all property furnished by the Government shall remain in the Government. Title to all property purchased with Grant funds shall pass to and vest in the Government upon delivery of such property by the vendor. Title to Government property shall not be affected by the incorporation or attachments thereof to any property not owned by the Government, nor shall such Government property or any part thereof, be or become a fixture or lose its identity as personalty by reason of affixation to any realty.

### **24. PRINCIPAL INVESTIGATOR**

The availability of the services of the person named in the Notice of Grant as "principal investigator" is one of the conditions of the Grant. Grantee agrees to inform the Government immediately whenever it appears to be impossible for him to continue to work on the project as planned. Under such circumstances the Grant may be revoked unless a substitute, to be approved by OMPER, is found.

### **25. POLITICAL ACTIVITY**

No funds provided hereunder shall be used for any partisan political activity or to further the election or defeat of any candidate for public office and no part of the administration of the program authorized by this contract shall be intermingled with or closely affiliated with any partisan political activity. In addition, it should be noted that employees of public bodies and community action agencies may be subject to limitations on their political activities under the Hatch Act [5 U.S.C. 118k (a), 18 U.S.C. 595].

## APPENDIX F

### MEMBERSHIP OF THE SUBCOMMITTEE ON RESEARCH OF THE NATIONAL MANPOWER ADVISORY COMMITTEE

## Appendix F

# U.S. DEPARTMENTS OF LABOR AND HEALTH, EDUCATION, AND WELFARE

National Manpower Advisory Committee, Washington, D.C.

## SUBCOMMITTEE ON RESEARCH

### *Membership*

Dr. Richard A. Lester, Chairman  
Chairman, Department of Economics  
Princeton University  
Princeton, N.J.

Irving Beller  
Economist  
Department of Research  
AFL-CIO  
Washington, D.C.

Dr. C. E. Bishop  
Head, Department of Agricultural Economics  
North Carolina State University  
Raleigh, N.C.

James R. Bright  
Professor of Business Administration  
Harvard Business School  
Boston, Mass.

Dr. Rupert N. Evans  
Dean, College of Education  
University of Illinois  
Urbana, Ill.

Samuel Ganz  
Commissioner of Manpower and Career Development  
Human Resources Administration of the City  
of New York  
New York, N.Y.

Dr. Eli Ginzberg (Ex Officio Member)  
Chairman of National Manpower Advisory  
Committee  
Director of Conservation of Human Resources  
Columbia University  
New York, N.Y.

Dr. Robert B. Highsaw  
Head, Department of Political Science  
University of Alabama  
University, Ala.

Dr. Charles C. Killingsworth  
Professor of Industrial and Labor Relations  
Michigan State University  
East Lansing, Mich.

Dr. Hylan G. Lewis  
Professor of Sociology  
Howard University  
Washington, D.C.

Dr. William H. Miernyk  
Director, Regional Research Institute  
West Virginia University  
Morgantown, W. Va.

Dr. Nevitt Sanford  
Professor of Psychology  
Institute for Study of Human Relations  
Stanford University  
Stanford, Calif.

Gerald G. Somers  
Professor of Economics  
University of Wisconsin  
Madison, Wis.

Ros. Stagner  
Chairman, Department of Psychology  
Wayne State University  
Detroit, Mich.

Dr. William Foote Whyte  
Professor of Industrial Relations  
New York State School of Industrial  
and Labor Relations  
Cornell University  
Ithaca, N.Y.

**APPENDIX G**

**MANPOWER DEVELOPMENT AND TRAINING  
ACT OF 1962, TITLE I, AS AMENDED**

## Appendix G

# MANPOWER DEVELOPMENT AND TRAINING ACT OF 1962, TITLE I, AS AMENDED<sup>1</sup> (42 U.S.C. 2571-2620)

## AN ACT

Relating to manpower requirements, resources, development, and utilization, and for other purposes.

*Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That this Act may be cited as the "Manpower Development and Training Act of 1962."*

### TITLE I—MANPOWER REQUIREMENTS, DEVELOPMENT, AND UTILIZATION

#### Statement of Findings and Purpose

**SEC. 101.** The Congress finds that there is critical need for more and better trained personnel in many vital occupational categories, including professional, scientific, technical and apprenticeable categories; that even in periods of high unemployment, many employment opportunities remain unfilled because of the shortages of qualified personnel; and that it is in the national interest that current and prospective manpower shortages be identified and that persons who can be qualified for these positions through education and training be sought out and trained as quickly as is reasonably possible, in order that the Nation may meet the staffing requirements of the struggle for freedom. The Congress further finds that the skills of many persons have been rendered obsolete by dislocations in the economy arising from automation or other technological developments, foreign competition, relocation of industry, shifts in market demands, and other changes in the structure of the economy; that Government leadership is necessary to insure that the benefits of automation do not become burdens of widespread unemployment; that the problem of assuring sufficient employment opportunities will be compounded by the extraordinarily rapid growth of the labor force in the next decade, particularly by the entrance of young people into the labor force, that improved planning and expanded efforts will be required to assure that men, women, and young people will be trained and avail-

<sup>1</sup> P.L. 87-415, Mar. 15, 1962, 76 Stat. 24-33, as amended by (a) P.L. 87-729, Oct. 1, 1962, 76 Stat. 679, (b) P.L. 88-214, Dec. 19, 1963, 77 Stat. 422, (c) P.L. 89-15, Apr. 26, 1965, 79 Stat. 75, (d) P.L. 89-792, Nov. 7, 1966, 80 Stat. 1434, and (e) P.L. 89-794, Nov. 8, 1966, 80 Stat. 1451.

able to meet shifting employment needs; that many persons now unemployed or underemployed, in order to become qualified for reemployment or full employment must be assisted in providing themselves with skills which are or will be in demand in the labor market; that the skills of many persons now employed are inadequate to enable them to make their maximum contribution to the Nation's economy; and that it is in the national interest that the opportunity to acquire new skills be afforded to these people with the least delay in order to alleviate the hardships of unemployment, reduce the costs of unemployment compensation and public assistance, and to increase the Nation's productivity and its capacity to meet the requirements of the space age. The Congress further finds that many professional employees who have become unemployed because of the specialized nature of their previous employment are in need of brief refresher or reorientation educational courses in order to become qualified for other employment in their professions, where such training would further the purposes of this Act. It is therefore the purpose of this Act to require the Federal Government to appraise the manpower requirements and resources of the Nation, and to develop and apply the information and methods needed to deal with the problems of unemployment resulting from automation and technological changes and other types of persistent unemployment.

### **Evaluation, Information, and Research**

**SEC. 102.** To assist the Nation in accomplishing the objectives of technological progress while avoiding or minimizing individual hardship and widespread unemployment, the Secretary of Labor shall—

(1) evaluate the impact of, and benefits and problems created by automation, technological progress, and other changes in the structure of production and demand on the use of the Nation's human resources; establish techniques and methods for detecting in advance the potential impact of such developments; develop solutions to these problems, and publish findings pertaining thereto;

(2) establish a program of factual studies of practices of employers and unions which tend to impede the mobility of workers or which facilitate mobility, including but not limited to early retirement and vesting provisions and practices under private compensation plans; the extension of health, welfare, and insurance benefits to laid-off workers; the operation of severance pay plans; and the use of extended leave plans for education and training purposes. A report on these studies shall be included as part of the Secretary's report required under section 107;

(3) appraise the adequacy of the Nation's manpower development efforts to meet foreseeable manpower needs and recommend needed adjustment, including methods for promoting the most effective occupational utilization of and providing useful work experience and training opportunities for untrained and inexperienced youth;

(4) promote, encourage, or directly engage in programs of information and communication concerning manpower requirements, development, and utilization, including prevention and amelioration of undesirable manpower effects from automation and other technological developments and improvement of the mobility of workers;

(5) arrange, through grants or contracts, for the conduct of such research and investigations as give promise of furthering the objectives of this Act; and

(6) establish a program of experimental, developmental, demonstra-

tion and pilot projects, through grants to or contracts with public or private nonprofit organizations, or through contracts with other private organizations, for the purpose of improving techniques and demonstrating the effectiveness of specialized methods in meeting the manpower, employment, and training problems of worker groups such as the long-term unemployed, disadvantaged youth, displaced older workers, the handicapped, members of minority groups, and other similar groups. In carrying out this subsection the Secretary of Labor shall, where appropriate, consult with the Secretaries of Health, Education, and Welfare, and Commerce, and the Director of the Office of Economic Opportunity. Where programs under this paragraph require institutional training, appropriate arrangements for such training shall be agreed to by the Secretary of Labor and the Secretary of Health, Education, and Welfare. He shall also seek the advice of consultants with respect to the standards governing the adequacy and design of proposals, the ability of applicants, and the priority of projects in meeting the objectives of this Act.

### **Job Development Programs**

**SEC. 103.** The Secretary of Labor shall stimulate and assist, in cooperation with interested agencies both public and private, job development programs, through on-the-job training and other suitable methods, that will serve to expand employment by the filling of those service and related needs which are not now being met because of lack of trained workers or other reasons affecting employment or opportunities for employment.

### **Labor Mobility Demonstration Projects**

**SEC. 104.** (a) During the period ending June 30, 1968, the Secretary of Labor shall develop and carry out, in a limited number of geographical areas, pilot projects designed to assess or demonstrate the effectiveness in reducing unemployment of programs to increase the mobility of unemployed workers by providing assistance to meet their relocation expenses. In carrying out such projects the Secretary may provide such assistance, in the form of grants or loans, or both, only to involuntarily unemployed individuals who cannot reasonably be expected to secure full-time employment in the community in which they reside, have bona fide offers of employment (other than temporary or seasonal employment), and are deemed qualified to perform the work for which they are being employed.

(b) Loans or grants provided under this section shall be subject to such terms and conditions as the Secretary shall prescribe, with loans subject to the following limitations:

- (1) there is reasonable assurance of repayment of the loan;
- (2) the credit is not otherwise available on reasonable terms from private sources or other Federal, State, or local programs;
- (3) the amount of the loan, together with other funds available, is adequate to assure achievement of the purposes for which the loan is made;
- (4) the loan bears interest at a rate not less than (A) a rate determined by the Secretary of the Treasury, taking into consideration the average market yield on outstanding Treasury obligations of comparable maturity, plus (B) such additional charge, if any, toward covering other costs of the program as the Secretary may determine to be consistent with its purposes; and



(5) the loan is repayable within not more than ten years.

(c) Of the funds appropriated for a fiscal year to carry out this Act, not more than \$5,000,000 may be used for the purposes of this section.

### **Trainee Placement Assistance Demonstration Projects**

**SEC. 105.** During the period ending June 30, 1968, the Secretary of Labor shall develop and carry out experimental and demonstration projects to assist in the placement of persons seeking employment through a public employment office who have successfully completed or participated in a federally assisted or financed training, counseling, work training, or work experience program and who, after appropriate counseling, have been found by the Secretary to be qualified and suitable for the employment in question, but to whom employment is or may be denied for reasons other than ability to perform, including difficulty in securing bonds for indemnifying their employers against loss from the infidelity, dishonesty, or default of such persons. In carrying out these projects the Secretary may make payments to or contracts with employers or institutions authorized to indemnify employers against such losses. Of the funds appropriated for a fiscal year to carry out this Act, not more than \$300,000 may be used for purposes of this section.

### **Skill and Training Requirements**

**SEC. 106.** The Secretary of Labor shall develop, compile, and make available, in such manner as he deems appropriate, information regarding skill requirements, occupational outlook, job opportunities, labor supply in various skills, and employment trends on a National, State, area, or other appropriate basis which shall be used in the educational, training, counseling, and placement activities performed under this Act.

### **Manpower Report**

**SEC. 107.** The Secretary of Labor shall make such reports and recommendations to the President as he deems appropriate pertaining to manpower requirements, resources, use, and training; and the President shall transmit to the Congress within sixty days after the beginning of each regular session (commencing with the year 1963) a report pertaining to manpower requirements, resources, utilization, and training.

# INDEX

	Page
<b>A</b>	
Adams, Leonard P. ....	75
Adelman, Harvey M. ....	37
Adelson, Marvin ....	37
Age Groups ....	20, 31, 48, 57, 61, 86
Aged Persons (See Older Workers)	
Agriculture	
Labor Management Relations in. ....	75, 81
Migrant Farmworkers (See also Migratory Workers) ....	23, 56, 60, 62, 76, 86
Rural Sociology ....	60, 76, 86
Technological Change in ....	54, 78
Alabama ....	112
Alix, Ernest K. ....	86
Alpert, Ida ....	7
Alter, Henry C. ....	26, 109
American Association of University Women. ....	104
American Indians (See Indians, American)	
American Institute for Research. ....	104
American University ....	73, 113
Ammer, Dean S. ....	110
Andrews, W. H. ....	78
Appalachian Area ....	56, 64, 69
Apprenticeship (See Training)	
Area Studies (See Regional and Area Studies)	
Arizona ....	73, 93
Arizona State University ....	93
Arizona, University of ....	73, 113
Arkansas ....	53
Arkansas, University of ....	53
Arnstein, George ....	7
Aronson, Elliot ....	108
Aronson, Sidney ....	62
Arthur D. Little, Inc. ....	104
Aspirations, Career ....	37, 57, 61, 64, 83
College ....	57
Upward Social Mobility ....	61
Association for the Help of Retarded Children. ....	7
Atlanta University ....	47
Attitudes	
Blue-Collar ....	37, 41, 61, 82

	Page
<b>Attitudes—Continued</b>	
Career ....	27, 59
Maritime Officers ....	66
Trainees ....	22, 40, 61, 99
Unemployed ....	24, 66, 87, 108
White-Collar ....	37, 41, 64
Youth ....	42, 99
Auerbach Corporation ....	104
Automation (See Technological Change)	
Ax, Albert F. ....	21

## B

Bain, Trevor ....	73, 113
Baldwin, Stephen E. ....	66
Barbash, Jack ....	68
Barnes, B. L. ....	58
Baron, Ruben ....	40
Bass, Alan ....	40
Baum, Samuel ....	10
Becker, Joseph M. ....	9
Behavior	
Adaptation by Migrants ....	56, 62
Career Commitment ....	61
Career Patterns ....	64
Chronically Unemployed ....	66
Educational Aspirations ....	57
Employee Reaction to Technological Change. ....	61, 85
Job Search Patterns. ....	32
Labor Force ....	31, 55
Negro Examinees ....	65
Occupational Aspirations ....	57, 61
Rewards and Self-Perception ....	40
Self-Employed Workers ....	69
Work Environment ....	66, 86
Work and Nonwork ....	68
Young Workers ....	24
Benefit-Cost Analysis (See Cost-Benefit Analysis)	
Benefits, Employee ....	9, 108
Benishay, Haskel ....	83
Benjamin, Darrell R. ....	64
Beresford, John ....	105

	Page
Berg, Ivar	55
Bergstrom, Howard E.	24, 108
Berry, Charles A.	114
Bezoni, R. H.	109
Biderman, Albert B.	8
Bishop, C. E.	179
Black, Stanley	34
Blauner, Robert	54
Bloch, Joseph	107
Blue-Collar Employment	41, 49, 54, 55, 57, 58, 78, 83
Blume, Paul R.	63
Boggs, Gerald E.	63
Borus, Michael E.	24, 80
Bowling Green State University	73
Bowser, James A.	49
Braden, Paul	49
Bradford, David	22
Brandeis University	53
Brazziel, William F.	112
Briggs, Vernon M.	38
Brobst, Harry K.	63
Brown, Arthur A.	104
Brown, David	110
Brown, Jack	84
Bundy, Mary Lee	78, 114
Burack, Elmer H.	18
Bureau of Social Science Research, Inc.	7, 8, 74, 93, 104, 113
Burns, Arthur F.	55
Byron, Rev. William, Jr.	58

### C

Cadmus, Robert R.	30
California	8, 9, 34, 36, 37, 53, 65, 74, 84, 87, 88
California, University of, at Berkeley	8, 9, 53, 54, 74, 104
California, University of, at Los Angeles	9, 54, 93
Cambridge Center for Social Studies	9
Campbell, Rex R.	82
Career Choice	36, 57, 75
Career Guidance (See Counseling, Vocational)	
Career Patterns	39, 59, 64, 83
Women	53
Career Planning	27, 53, 57, 61, 83
Carroll, Adger B.	110
Census, Bureau of the	10, 31, 105
Central Washington State College	75
Chalupsky, A. B.	34, 110
Chamberlain, Neil W.	70
Chaneles, Sol	11, 105
Charleton, Huey	47
Chernick, Jack	111
Cherry, Frank T.	49
Chicago, University of	54
Children	
Working Mothers	42
Choldin, Harry M.	23
Christenson, C. L.	78
Cities (See Urban Problems)	
Civil Rights Act of 1964	40
Clampitt, Robert H.	101
Clanoff, Richard	33

188

	Page
Clark, David H.	48
Cloninger, Dale O.	86
Cobb, Beatrix	66
Cohen, Jacob	7
Cohen, Julius S.	65
Cohen, Malcolm S.	58, 114
Colorado	105
Colorado, University of	105
Columbia University	11, 13, 54, 55, 105
Communities	
Development Programs of	49, 77
Economically Stagnant	75
Organization of	59, 80
Company Planning	61
Connecticut	69, 70, 94
Contracting, Defense (See Defense Contracting)	
Coons, Dorothy H.	108
Cooper, Sophia	107
Coordination of Manpower Policy (See Manpower Policies and Planning)	
Cornell University	56, 75, 76
Cost-Benefit Analysis	69
Application to Training	48, 54, 99
Cothran, Tilman C.	47
Counseling, Vocational	63, 65, 67, 74, 81, 104
Counselor Training	81, 93, 109
Crabtree, James S.	67
Creamer, Daniel	26, 109
Crossman, E. R. F. W.	8, 104
Culturally Disadvantaged (See also Disadvantaged Workers)	38

### D

Daane, Calvin	93
Dailey, Charles A.	73, 113
Dalton, Melville	93
Davis, Frank G.	8
Davis, Louis E.	104
Dawis, Rene	24
Defense, Contracting	
Community Economic Life and	14
Economy of	14
Employment in	73
Manpower Implications of	73, 113
Defense, U.S. Department of	14
Delehanty, George E.	114
Delinquent Youth (See Youth)	
Denman, Clayton C.	75
Denver, University of	106
DePoy, Marilyn Joyce	67
Dialect Remediation	38
Diamond, Daniel E.	29
Diebold Group, Inc.	106
Dillard University	114
Disadvantaged Workers	11, 29, 38, 54, 66, 73, 82, 101
Discrimination	
In Employment	23, 38, 59, 73, 82
In Lending	84
District of Columbia	7, 10, 14, 15, 19, 20, 27, 28, 29, 39, 40, 42, 58, 73, 74, 76, 93, 94, 98, 99
Dodge, Murray	104

	Page
Doeringer, Peter B. ....	17
Dolan, Eleanor .....	104
Drew, Alfred S. ....	35
Dropouts	
High School .....	37, 63, 67, 93, 115
MDTA Training .....	63
Duncan, Otis Dudley .....	59
Dunlap and Associates, Inc. ....	94
Dunlop, John T. ....	16, 17, 56, 57, 77, 106
Durand, John D. ....	64

## E

Earnings (See also Income; Wage Rates)	
Distribution of .....	49, 56
Educational Levels .....	64, 70
Lifetime .....	48
Specified Industries and Occupations .....	42
Easterlin, Richard A. ....	109
Economic Growth and Development .....	105
Employment, Effects on .....	66, 105
Manpower Implications .....	11, 49
Economic Opportunities	
Perception of .....	47, 48, 60
Economic Planning and Forecasting (See Forecasting; Projections)	
Economic Policy	
Effect of .....	60
Formation of .....	55, 56
Economic Systems Corporation .....	94
Education (See also Training)	
Effect on Occupational Level .....	11, 64
Effect of Prior Work Experience on .....	61
Higher Education .....	57, 109, 114, 115
Income .....	64, 70
Job Performance .....	108
Mobility .....	53
Occupation .....	42, 85
Professional .....	55, 70
Racial Minorities .....	41
Technical .....	110, 115
Vocational (See also Vocational Education and Training) .....	25, 37, 38, 63, 67, 109
Educational Attainment .....	10, 17, 35, 48
Educational Testing Service .....	95
Elliot, Charles .....	96
Employer Policies (See Hiring Standards; Management Practices)	
Employment	
Agencies, European .....	14, 105
Agencies, Private .....	36, 74
Agencies, State .....	36, 75
Defense Contracting .....	73
Factors Associated With .....	20
Growth of .....	11, 42
Industry and Occupation .....	57
Job-Bank Concept .....	58
Negroes and .....	23, 30, 36, 40, 48, 59
Projections (See Projections)	
Service Industries .....	49
Trends in .....	11, 42, 55, 88
Women .....	42, 58, 70

	Page
Employment Security, Bureau of .....	14, 15, 106
Employment Service, U.S.	
Training Programs of (See Federal Manpower Development Programs)	
Eninger, M. V., Sr. ....	104
Environment, Influence of (See also Working Conditions) .....	57, 59, 61, 65, 66, 106
Evans, Robert, Jr. ....	114

## F

Fabrizio, Ralph .....	94
Factory Workers (See also Blue-Collar Employment) .....	48, 53
Farmworkers (See also Agriculture; Migratory Workers)	
Effects of Technological Change on .....	54, 78
Employment and Unemployment .....	23, 60
Income .....	60
Management Relations .....	75, 81
Migration, Off Farm .....	78
Mobility of .....	76
Occupational Alternatives .....	23
Productivity of .....	78
Seasonal .....	76
Shortages of .....	60
Faunce, William A. ....	61
Fearn, Robert M. ....	48
Federal Manpower Development Policies	
Effects on Employment .....	60, 70
Objectives of .....	70
Federal Manpower Development Programs (See also Manpower Development Programs)	
Impact on Community of .....	60, 66, 77, 80, 101
Local Receptivity to .....	80
MDTA Training Programs .....	22, 25, 33, 54, 62, 63, 65, 67, 88
Aptitude Tests .....	21
Attitude Tests .....	21, 22
Curriculums .....	63
Effectiveness of .....	25, 54, 62, 65, 77, 88, 95-101
Objectives of .....	81
Neighborhood Youth Corps .....	93-100, 113
U.S. Employment Service Training Programs .....	40
Ferguson, John Duncan A. ....	83
Ferman, Louis A. ....	23, 59, 79, 80, 108
Fersh, George L. ....	107
Filley, Alan C. ....	67, 68
Fine, Sidney .....	39
Finegan, Aldrich T. ....	87
Fink, Joseph .....	37
Fink, Stephen .....	101
Finkner, A. L. ....	35, 99, 110
Finner, Stephen L. ....	48
Fishman, Leslie .....	105
Fitzpatrick, Rev. Joseph P. ....	56
Florida .....	86
Folger, John K. ....	29, 110
Foltman, Felician F. ....	56
Fordham University .....	56, 96
Forecasting (See also Projections)	
Economic Projections .....	17, 34, 49, 55, 83, 84, 88
Manpower Supply and Demand .....	20, 28, 34, 49, 74, 76, 77, 81, 84, 105, 111
Regional Forecasts .....	49, 74, 115

	Page
Foreign Labor .....	64, 87
Form, William H. ....	60, 61
Forsgren, Roderick A. ....	48
Foster, L. H. ....	112
Fottler, Myron D. ....	54
Franke, Walter H. ....	18
Franklin, N. ....	19
Freeberg, Norman C. ....	95
Freeman, Richard B. ....	56
French, J. R. P., Jr. ....	22
Friedland, Williana H. ....	76
Friedlander, Frank .....	101
Fringe Benefits (See Benefits, Employee)	
Fulmer, John .....	106

## G

Gadson, James H. ....	49
Gayer, Paul D. ....	65
Geneva, Switzerland .....	19
George Washington University, The .....	76, 96
Georgia .....	47, 77
Georgia Institute of Technology .....	106
Georgia, University of .....	77
Gerber, William .....	19, 107
Gillingham, J. B. ....	56
Ginzberg, Eli .....	11
Gitlow, Abraham L. ....	82
Glass, John ..	93
Goldfarb, Robert ..	69
Goldstein, Harold M. ....	83
Goins, Valmore R. ....	49
Goodman, Leonard .....	74, 93, 113
Gordon, Margaret S. ....	9, 104
Gordon, R. A. ....	104
Grabe, Sven .....	19
Grambling College .....	114
Green, Alfred L. ....	14, 106
Greene, Stanley S. ....	10, 105
Greenfield, Harry I. ....	105
Greenleigh, Arthur .....	15, 106
Greenleigh Associates .....	15, 106
Greenspan, Harry J. ....	20
Gross, Edward .....	81
Groves, Harold M. ....	69
Guidance, Vocational (See Counseling, Vocational)	
Guion, Robert M. ....	73
Gurin, Gerald .....	22
Gusfield, Joseph R. ....	57

## H

Handicapped Workers (See also Mentally Handicapped) .....	75, 82
Harbison, Frederick H. ....	27, 34, 64
Hard-Core Unemployed (See Unemployed)	
Hardin, Einar .....	24
Harmeling, Mary B. ....	56
Harms, Louis T. ....	49, 111
Harper, Dean .....	86
Harris, Benjamin ..	30
Harris, John K. ....	100

	Page
Harvard University .....	16, 17, 18, 56, 57, 77, 106
Harwood, Edwin S. ....	99
Haurek, Edward W. ....	57
Hausman, Leonard J. ....	68, 115
Health Services Industry .....	11, 30, 47
Employment in .....	54, 70, 83
Shortage Occupations in .....	54, 70, 83
Henderson, Van .....	94
Heneman, Herbert C., Jr. ....	81
Herberg, Dorothy M. ....	59
Herman Miller, Inc. ....	106
Herrnstadt, Irwin L. ....	31
Hiestand, Dale L. ....	105
High School Dropouts (See Dropouts)	
Hilton, Mary .....	113
Hiring Standards .....	9, 26, 29, 34, 59, 64, 81, 83
Hirschleifer, Jack .....	54
Holmes, John D. ....	49
Hornbostle, Victor O. ....	63
Horowitz, Morris A. ....	31, 83
Horvitz, Daniel G. ....	99
Houston, University of .....	107
Hubner, Walter .....	68
Huff, Stanley W. ....	64
Human Sciences Research, Inc. ....	107
Hurdley, James R., Jr. ....	81
Hug, A. M. ....	99
Huson, Carolyn .....	115
Hyman, Herbert .....	75

## I

Ihnen, Loren B. ....	110
Illinois .....	18, 27, 57, 77, 82, 86, 97
Illinois Institute of Technology .....	18
Illinois, University of .....	18, 57, 77
Illiteracy .....	37
Incentives (See also Motivation)	
Jobseeking .....	38, 68
Occupational .....	66, 70, 75
Income (See also Earnings; Wage Rates)	
Distribution of ..	56
Farmworkers .....	60
Lifetime .....	48
Relationship to Education .....	64, 70, 82, 106
Relationship to Race .....	82
Indiana .....	35, 64, 78, 85
Indiana University Foundation .....	78
Indians, American .....	49, 63
Industrial Relations (See also Labor Unions) .....	68
Industry Studies .....	9, 11, 48, 49, 55, 57, 78
Inflation .....	56
International Labor Force Studies	
Apprenticeship and Training .....	19, 104, 107
Employment and Unemployment .....	11, 14, 19, 107
Industrial Therapy Programs .....	108
Mobility .....	11, 107
Occupations and Skills .....	64
International Labour Organisation .....	19, 107
Iowa .....	47, 53
Iowa State University of Science and Technology .....	47
Iowa, University of .....	58

**J**

	Page
Jaffe, Richard .....	82, 115
Jakubauskas, Edward B. ....	47
Job Market .....	48, 49, 56, 58
Farm Work Force .....	60, 78
Immigration .....	65
Male-Female Competition in .....	67
Supply and Demand .....	8, 9, 15, 17, 20, 34, 49, 53, 58
Trends .....	34, 55, 78
Youth .....	66
Job Matching Systems .....	114
Job Obsolescence (See Technological Change)	
Job Placement .....	18, 33, 73, 74, 77, 79, 82, 110, 113
Job Redesign .....	20, 108
Job Requirements .....	34
Job Satisfaction .....	38, 55, 61, 63, 64, 66, 68, 83
Jobseeking	
Methods Used .....	20, 32, 36, 48, 59, 112
Job Vacancies .....	26, 109
Johnson, David .....	41, 112
Johnson, Louise Ann .....	74, 113
Joint Council on Economic Education .....	107
Jones, Ethel Bengree .....	77
Jones, Isabella J. ....	109
Jones, Jane Gaudette .....	53

**K**

Kamen, Charles .....	97
Katz, Joseph .....	36
Kaufman, Jacob J. ....	32, 33
Kehrer, Barbara H. ....	70
Kellogg, Frazier .....	79, 114
Keyserling, Mary Dublin .....	42, 113
Killinger, George G. ....	86
Kincaid, Harry .....	111
Kinsey, Barry .....	32
Kern, Harold A. ....	36
Korns, Alexander .....	56
Koziara, Karen .....	87
Kreider, L. Emil .....	62
Kuh, Edwin .....	58
Kuhn, James W. ....	54
Kuptzin, Harold .....	15

**L**

Labor, Farm (See Agriculture; Farmworkers; Migratory Workers)	
Labor Force	
Composition of .....	8, 54, 59, 78, 105
Marital Characteristics of .....	59
Participation .....	10, 32, 55, 83, 87, 104, 107
Labor Legislation	
Civil Rights Act of 1964 .....	40
Manpower Development and Training Act of 1962 .....	1, 67, 181
Nurse Training Act of 1964 .....	70
Labor Market (See Job Market)	
Labor Mobility (See Mobility)	
Labor Statistics, Bureau of .....	19, 20, 107, 108
Labor Supply and Demand .....	53, 55, 57, 60, 70, 74

**Page**

Labor Turnover .....	26, 55, 57
Labor Unions (See also Industrial Relations) .....	38, 49
Lafayette Clinic .....	21
Landay, Donald M. ....	107, 108
Laner, Stephen .....	8
Lantz, Herman R. ....	86
Larson, Olaf F. ....	75
Lawlis, G. Frank .....	66
Layoffs .....	36, 73, 108
Lebergott, Stanley .....	108
LeBold, William K. ....	64
Lecht, Leonard .....	28
Lee, Everett .....	78
Leiserson, Mark W. ....	69, 70
Leisure .....	48, 68
Leshner, Saul .....	33
LeSourd, David A. ....	88, 115
Levin, Max M. ....	36
Levir, Louis .....	32
Liebhofsky, E. E. ....	107
Light, Ivan H. ....	53
Literature Surveys .....	79, 80
Little, J. Kenneth .....	41
London, H. H. ....	25
Looma, R. P. ....	36, 111
Louisiana .....	114, 115
Low Income .....	32, 60, 80, 114
Lyers, Robert P. ....	112

**M**

Maher, James .....	106
Maier, Frank H. ....	54
Maine .....	48
Maine, University of .....	48
Management Practices	
Decisions to Automate .....	16, 61, 111
Hiring and Promotion Policies .....	9, 23, 29, 34, 64, 75, 79, 81, 82
Managerial Talent .....	47, 62
Mandell, Wallace .....	37, 100, 111
Mangum, Garth L. ....	27
Mannel, Allan D. ....	105
Manpower (See also Federal Manpower Development Programs; Manpower Development Programs; Manpower Policies and Planning)	
Determination of Needs .....	55
Regional Studies of (See Regional and Area Studies)	
Supply and Demand .....	53, 55, 57, 58, 70, 74, 78
Manpower Development and Training Act of 1962, as Amended .....	1, 67, 181
Manpower Development Programs	
Cost-Benefit Analyses of .....	24, 54, 69, 98, 99
Effectiveness of .....	25, 62, 65, 66, 95-101
Federally Supported (See Federal Manpower Development Programs)	
In-School Youth .....	93, 97
Local Efforts .....	77, 80, 101
Minority Groups .....	63, 81
Out-of-School Youth .....	37, 63, 93, 94, 96, 100
Shortage Occupations .....	54, 70

	Page
Manpower Development Programs—Continued	
Special Problem Groups .....	33, 37, 63, 99
Vocational Training .....	25, 35, 38, 63, 67
Manpower Policies and Planning (See also Federal Manpower Development Policies) .....	109, 110
Companies .....	64, 81
Current Developments in .....	27, 32, 34, 37, 63
Federal .....	60, 70
Integration of .....	27
Manpower Projections (See Projections; Forecasting)	
<i>Manpower Report of the President</i> .....	11, 34, 105, 110
Manpower Research Programs .....	1-3
Manufacturing .....	11, 57
Marshall, F. Ray .....	38, 112
Marshall, Herbert A. ....	49
Maryland .....	22, 78
Maryland, University of .....	22, 58, 78
Mason, John D. ....	60
Massachusetts .....	9, 16, 17, 18, 31, 53, 56, 58, 77, 78, 83
Massachusetts Institute of Technology .....	58, 79, 114
Massachusetts, University of .....	78
McCune, Shirley D. ....	96
McNally, Gertrude Bancroft .....	108
McNamara, Robert .....	97
McNelis, David P. ....	10
McNichols, Thomas J. ....	18
Mechanization (See Technological Development)	
Medow, Herman .....	101
Mentally Handicapped	
Employment of .....	7
Job Prospects for .....	82
Michigan .....	21, 22, 23, 24, 37, 40, 60, 61, 67, 79, 80, 81
Michigan State University .....	23, 24, 60, 61, 80, 81
Michigan, University of .....	22, 23, 37, 59, 79, 80, 108, 114
Migration (See also Manpower Development Programs; Migratory Workers; Mobility)	
Hardships of .....	56, 62
Need for Urban Assistance Facilities .....	7, 56, 113
Patterns .....	48
Rates .....	48, 78
Training and Relocation Assistance .....	7
Migratory Workers	
Attitudes and Motivation of .....	23, 60, 76, 86
Camp Communities .....	76
Earnings and Employment of .....	56, 60
Family Living Patterns .....	62
Miles, Guy H. ....	30, 98, 110
Military Personnel, Retired .....	8
Miller, Ann R. ....	35
Miller, Glen W. ....	62
Miller, Herman .....	106
Miller, Paul B. ....	62
Miller, Robert W. ....	88
Miller, Stephen J. ....	53
Milligan, William .....	20, 108
Mills, Daniel Quinn .....	57
Miner, Jerry .....	65
Minimum Wages	
Unemployment and .....	54
Mining .....	57, 78
Minnesota .....	24, 30, 81, 96, 98
Minnesota, University of .....	24, 108

	Page
Minority Groups (See also Indians, American; Negroes; Nonwhites)	
Behavior .....	39, 65
Counseling Needs .....	81
Discrimination Against .....	23, 38, 59, 73, 82, 84
Education .....	27, 41, 53
Employment and Unemployment Among .....	23, 30, 40, 47, 48, 54, 79, 82, 105
Mobility of .....	53
Training Programs .....	38, 41, 63
Mintz, Warren .....	62
Missouri .....	25, 66, 82
Missouri, University of .....	25, 82, 109
Mobility	
Barriers to .....	57, 112
Education .....	53
Factors Influencing .....	53, 61, 100, 107
Federal Assistance Programs .....	69
Geographic .....	76, 78
Occupational .....	112
Patterns of .....	17, 41, 53, 60, 62
Personal Characteristics .....	61
Monet, Jacques .....	107
Moore, Geoffrey H. ....	109
Moser, Collette .....	68
Motivation	
Career Commitment .....	36
Career Entry .....	53, 55, 61, 70, 75
Concept of .....	48
Dropout Prevention .....	67
Educational Aspirations .....	57
Labor Turnover .....	55
MDTA Trainees .....	22, 111
Occupational .....	57, 61
Physiological Responses .....	21
Welfare .....	68, 115
Work Environment .....	66, 86
Workers' .....	66, 68, 73
Mueller, Eva .....	37, 114
Muir, Allan H. ....	98, 99
Murray, Ray A. ....	78
Nadworny, Milton J. ....	115
National Analysts .....	97
National Bureau of Economic Research .....	109
National Committee for Children and Youth .....	109
National Education Association .....	25
National Educational Television .....	26, 109
National Goals	
Manpower Implications of .....	28
National Income	
Distribution of .....	49, 56
National Industrial Conference Board .....	26, 109
National Manpower Advisory Committee	
Subcommittee on Research .....	177
National Manpower Policy Task Force .....	27, 109
National Opinion Research Center .....	27, 82, 97, 109, 115
National Planning Association .....	28
National Science Foundation .....	29, 110

	Page
<b>Negroes (See also Minority Groups; Nonwhites)</b>	
Behavior of .....	65
College Graduates .....	27, 109, 114, 115
Counseling Needs of .....	81
Discrimination Against .....	23, 38, 59, 82, 84
Employment and .....	23, 40, 47, 48, 54, 79, 82, 102
Mobility Rate .....	53
Occupational Distribution .....	39, 59, 114
Special Educational Needs .....	41
Training Programs .....	38, 41
Unemployment of .....	30
Neighborhood Youth Corps .....	74, 93-100, 113
New Jersey .....	34, 64, 95
New School for Social Research, The .....	61
New York .....	7, 11, 13, 15, 25, 29, 37, 54, 55, 56, 61, 65, 75, 76, 82, 86, 96, 100, 101, 115
New York, State University of .....	83
New York University .....	29, 82, 110
Newman, Theodore E. ....	58
Niebuhr, Herman, Jr. ....	38
Noble, Jeanne L. ....	82
<b>Nonwhites (See also Indians, American; Minority Groups; Negroes)</b>	
Behavior of .....	65
Counseling Needs of .....	81
Discrimination Against .....	23, 38, 59, 82, 94
Employment of .....	23, 30, 40, 47, 48, 54, 73, 79, 82
Mobility of .....	53
Occupational Distribution .....	39, 59
Special Educational Needs .....	38, 41
Training Programs .....	38, 41, 63
Norgren, Paul A. ....	105
North Carolina .....	30, 35, 48, 99, 110
North Carolina Agricultural and Technical College. ....	30
North Carolina State University. ....	30, 48, 110
North Carolina, University of .....	30, 110
Northeastern University .....	31, 83, 110
Northern Michigan University .....	110
North Star Research and Development Institute. ....	30, 98, 110
Norton, John H. ....	76
Nosow, Sigmund .....	24
<b>O</b>	
Oakland Small Business Development Center. ....	84
Oaklander, Harold .....	55
Occupational Guidance (See Counseling, Vocational)	
Occupational Inheritance .....	57
Occupational Skills .....	18, 48, 70
Occupational Structure .....	106
Communities .....	59
<b>Occupations</b>	
Agricultural .....	60, 78
Choice of .....	57
Classification of .....	10, 17, 18, 39, 112
Domestics .....	82
Effect of Technological Change on .....	16, 17
Government Employees .....	10, 105
Law Enforcement .....	86
Library and Information Specialists .....	114
Managers and Supervisors. ....	18, 56, 62, 64, 69, 96, 105
Military .....	56, 104
Nonprofessional Aides (Subprofessional) ...	42, 54, 83

	Page
<b>Occupations—Continued</b>	
Professional .....	30, 53, 55, 56, 64, 110
Ranking of, by Earnings .....	17
Requirements by .....	104
Scientists and Engineers .....	13, 36, 56, 61, 64, 85, 105
Self-Employed .....	53, 84
Service .....	49, 54, 58, 105
Shortages .....	60, 70
Skilled Workers .....	31, 74
Technical .....	18, 19, 30, 41, 56, 64
Offenbacher, Deborah .....	61
Ohio .....	31, 62, 73, 101
Ohio State University .....	31, 62
Oklahoma .....	32, 49, 63
Oklahoma State University .....	32, 49, 63, 115
Older Workers .....	11, 20, 49, 86, 108
Oregon .....	84
Oregon, University of .....	84
Organized Labor (See Labor Unions)	
Ormsby, Ralph .....	33
Owner-Managers .....	53, 69, 84

**P**

Pallone, Nathaniel J. ....	111
Parker, John .....	37
Parkhurst, Kenneth L. ....	110
Patton, Michael J. ....	95
Parnes, Herbert S. ....	31, 62
Pearce, Frank C. ....	88
Pearl, Robert B. ....	105
Pease, John .....	60
Pejevich, Svetozar .....	115
Pelosi, John W. ....	65
Pennsylvania .....	32, 33, 34, 38, 49, 64, 85, 87, 97
Pennsylvania State University .....	32
Pennsylvania, University of .....	64, 85
Pensions (See Private Pension Plans)	
Perrucci, Carolyn C. ....	85
Peterson, Gertrude D. ....	111
Peterson, John M. ....	53
Philadelphia, The City of .....	33
Philco Corporation .....	34, 110
Phillips, Llad .....	57
Pierson, Frank .....	34, 110
Fiker, Jeffry .....	59
Placement, Job (See Job Placement)	
Planning Research Corporation .....	98, 99
Pollis, Nicholas .....	49
<b>Poverty (See also Disadvantaged Workers)</b>	
Cause and Effect Relationship .....	11, 49, 80
Definition and Measurement of .....	80, 114
Escape from .....	61
Programs to Combat .....	48, 49, 74
Powers, Mary G. ....	96
Pownall, George A. ....	22
Prasow, Paul .....	9
President's Task Force on Manpower Conservation. ....	110
Price, Daniel O. ....	39
Princeton University .....	34, 64
<b>Prison Inmates</b>	
Employment After Release .....	22
Training .....	22, 37



	Page
Private Pension Plans.....	107
Productivity .....	78
Projections (See also Forecasting).....	104
Employment Level .....	17
Evaluation of .....	68
Industrial .....	81, 111
Labor Force Participation.....	55, 83, 109
Manpower Needs for Specific Areas .....	28, 49, 68, 74, 76, 81, 84
Occupational .....	20, 69, 105
Puerto Ricans .....	84
Purdue University .....	35, 64, 85

## R

Racial Discrimination .....	23, 38, 59, 73, 82, 84
Ralstrom, Stig .....	67
Reder, Melvin W. ....	65, 87
Reemployment .....	73
Regional and Area Studies	
Cleveland, Ohio .....	7
Connecticut .....	70
Denver, Colo. ....	105
Houston, Tex. ....	99
Joplin, Mo. ....	25
Kansas City, Mo. ....	25
Los Angeles, Calif. ....	9
Maine .....	48
Maryland .....	78
Miami, Fla. ....	65
Michigan .....	60, 78, 110
Midwest (See also States by Name).....	68
New Haven, Conn.....	69
New York City.....	7
New York State.....	75
Ohio .....	62
Oklahoma City, Okla.....	63
Oregon .....	84
Ozarks Region .....	32, 49
Parkersburg, W. Va.....	25
Pennsylvania .....	49
Quincy, Mass. ....	25
Rochester, N.Y. ....	26
St. Louis, Mo.....	25
San Francisco Bay Area.....	36
Seattle, Wash. ....	66
South (See also States by Name).....	48
Tidewater Area of Virginia.....	49
Vermont .....	88, 115
Washington, D.C. ....	58
Wisconsin .....	15, 67
Rehabilitation Programs .....	33, 37
Relocation Programs (See Mobility)	
Research Techniques .....	105, 110
Research Triangle Institute.....	35, 99, 110
Retail Trade .....	69
Retarded Workers (See Mentally Handicapped)	
Retraining Programs (See also Education; Training)	
8, 24, 42, 48, 69, 78, 86, 88, 104, 112	
Reubens, Beatrice G.....	105
Rice University .....	99
Richards, Robert .....	111

	Page
Richardson, Reed C.....	112
Richardson, Robert B.....	56
Ridall, Richard .....	104
Ritter, Tom .....	15
Robert, Marcel .....	107
Robin, Gerald D.....	97
Rochester, University of.....	86
Rock, Donald A. ....	95
Rogers, Charles H.....	30
Rogers, Daniel C.....	70
Rogers, Virgil .....	25, 109
Rosenfeld, Carl .....	20
Rossi, Peter .....	27, 109
Rostker, Bernard D.....	65
Rubin, Israel .....	14
Ruchlin, Hirsch S.....	55
Rural Manpower (See Agriculture; Farmworkers; Mi- gratory Workers)	
Rutgers—The State University.....	111
Rytina, Joan H.....	60

## S

Saint Mary's College.....	115
Sam Houston State College.....	86
Samuels, Norman .....	108
Sandmeyer, Robert L.....	32, 49, 63
San Jose State College.....	36, 111
Satisfaction, Job (See Job Satisfaction)	
Schiltz, Michael .....	115
Schoen, Sterling H.....	66
School Dropouts (See Dropouts)	
Schultz, T. W.....	54
Scientific and Engineering Manpower	
11, 13, 36, 56, 64, 85, 105, 111	
Scoville, James G.....	18, 106
Seasonal Workers	
Earnings and Employment.....	57
Problems Regarding .....	75, 76
Seasonality of Employment.....	107
Selective Service Rejectees.....	35
Sellier, F. ....	107
Seltzer, George .....	81
Severance Pay Plans.....	107
Sharp, Laure M.....	7, 8, 104, 113
Shattuck, Gerald M.....	96
Shearer, John C.....	49
Shepard, Jon M.....	61
Sheppard, Harold .....	40, 112
Shey, Thomas H.....	61
Shirom, Arie .....	68
Sicron, Moshe .....	64
Silvius, G. Harold.....	67
Singleton, Robert .....	54
Skills	
Changing Requirements for.....	8, 11, 13, 34, 42, 74, 78, 105
Supply and Demand.....	8, 17, 18, 48, 60, 70
Utilization of .....	8, 37, 56
Smith, Wilbur J.....	69
Snedden, Lawrence E.....	61
Snyder, Jack H.....	69
Social Work .....	33, 59, 61

	Page
Somers, Gerald G.....	41, 67, 68
Sonquist, John .....	37
South Bend Community School Corp. ....	111
South Florida, University of.....	86
Southern Illinois University.....	86
Southern University A. & M. College.....	115
Spector, Aaron .....	33
Spier, John S.....	54
Stagner, Ross .....	40
Standard Metropolitan Statistical Areas. ....	11, 31, 40, 105
Stanford Research Institute.....	111
Stanford University .....	36, 65, 87
Staten Island Mental Health Society, Inc.....	37, 100, 111
Stein, Bruno .....	110
Stern, James .....	41, 112
Stevens, David W.....	33
Stieber, Jack .....	60
Stone, William F.....	48
Sturmthal, Adolf .....	77
Sullivan, Clyde E.....	37, 100, 111
Summers, Worth C.....	61
Sutker, Solomon .....	49
Swarthmore College .....	34
Sweet, James A.....	59
Sweney, Arthur .....	66
Sykes, Richard .....	96
Syracuse University .....	65
Systems Analysis .....	34, 37
Systems Development Corporation.....	37, 100

## T

Taplin, Lois G.....	115
Teal, Gilbert .....	94
Technological Change	
Adjustment .....	16, 105, 106, 114
Attitudes of Employees Toward.....	37, 61, 85
Clearinghouse on .....	107
Cost-Benefit Analysis of.....	104
Effect on Blue-Collar Employees.....	78
Effects on Farm Labor.....	54, 78
Effects On-the-Job .....	13, 68, 104
Extent of .....	105, 107
Health and Safety Aspects of.....	107
Hiring Standards .....	9
Job Displacement .....	18, 58, 78, 86
Joint Labor-Management Committees on.....	68
Manpower Implications of.....	105, 110, 111
Manpower Needs .....	3, 78
Preparation for .....	7
Temple, Frederick C.....	115
Temple University .....	38, 49, 87, 111
Tennessee .....	87
Testing .....	65, 88
Texas .....	38, 39, 66, 86, 99
Texas Technological College.....	66
Texas, University of.....	38, 39, 112
Thompson, Daniel C. ....	114
Thompson, George .....	107
Tobias, Jack .....	7
Toussaint, William .....	48

	Page
Training (See also Education; Manpower Development Programs; Federal Manpower Development Programs; Retraining)	
Apprenticeship .....	38, 41, 67, 74, 107, 112
Attitudes of Trainees (See Attitudes)	
Cost-Benefit Studies of.....	24, 48, 54, 69, 80, 98, 99
Effectiveness of .....	25, 31, 33, 35, 48, 61, 62, 69, 88, 94, 95, 97, 101, 107
Employer-Sponsored .....	108, 111
International Experiences in.....	19
Management Attitude Toward.....	48
MDTA .....	25, 54, 62, 63, 65, 88, 112
Need for .....	34, 41, 54, 61, 67
Occupational .....	83, 85, 110
On-the-Job .....	35, 107
Skilled Workers .....	19, 31, 74
Vocational .....	25, 30, 33, 35, 37, 47, 49, 63, 67
Wage and Hours Standards and.....	19
Women .....	42, 59, 70
Young Persons (See also Neighborhood Youth Corps) .....	74, 99, 112
Trout, Grafton .....	23
Trow, Martin A.....	53
Tuskegee Institute .....	112

## U

Ullrich, Robert A.....	66
Ulman, Lloyd .....	9, 74
Underutilization .....	11, 35, 48, 49, 77
Unemployed .....	11
Characteristics of .....	7, 26, 49, 66, 87
Jobseeking Experiences of.....	32, 36, 105, 111, 112
Long-Term .....	11, 33, 66, 79, 111
Work Attitudes of.....	77
Unemployment	
Approaches to .....	11, 19, 30, 33, 57, 77, 87
European .....	87
Factors Associated With.....	15, 20, 30, 33, 107
Income Distribution .....	56
Long-Term .....	33, 79
Skilled vs. Unskilled Rates.....	58, 114
Unemployment Insurance .....	9, 36, 80
Unionization .....	49
Upjohn Institute for Employment Research, W. E. ....	39, 40, 112
Urban Problems	
Studies of .....	7, 11, 20, 36, 49, 53, 56, 58, 66, 77, 87, 99, 101, 105, 108
U.S. Industries, Inc.....	112
U.S. Research and Development Corporation .....	101
Utah .....	112
Utah, University of.....	112

## V

Vacancies, Job (See Job Vacancies)	
Values .....	81
Vanderbilt University .....	87
Vermont .....	88
Vermont, University of.....	88, 115
Virginia .....	49, 100

	Page
Virginia State College at Norfolk.....	49, 112
Vocational Counseling .....	7, 63, 65, 67, 81
Vocational Education Act of 1963.....	15
Vocational Education and Training	
Effectiveness of .....	25, 33, 47, 49, 94, 115
Relation to Occupational Change.....	48
Subsidized .....	49, 63, 67
Value of .....	30, 37, 49, 63, 67, 104, 110
Vocational Guidance and Rehabilitation Services.....	112
Volunteer Service Work.....	20, 108

## W

Wachtel, Dawn Day.....	80, 114
Wage and Hours Standards	
Training Programs .....	19, 93
Wage Rates	
Farm vs. Nonfarm.....	60
Unemployment .....	54, 58, 64
Waisanen, F. B.....	61
Wallace, Gaylen R.....	63, 115
Walther, Regis .....	96
Walther, Richard .....	112
Warner, Aaron W.....	13, 55, 105
Warner, Larkin B.....	32, 49, 63
Washington .....	66, 75
Washington University .....	66
Washington, University of.....	66
Wasserman, Paul .....	78, 114
Watson, Donald A.....	84
Wayne State University.....	23, 40, 67, 80
Weinberg, Edgar .....	20, 108
Weinstein, Paul A.....	58
Welfare System .....	68
West Virginia .....	88
West Virginia University.....	88
Western Reserve University.....	101
Wilensky, Harold L.....	9
Wilson, Thomas F.....	55
Wisconsin .....	41, 67, 68, 69
Wisconsin, University of.....	41, 67, 68, 69, 112, 115

	Page
Women Workers .....	26, 109
Career Patterns of.....	53, 59, 105
Child-Care Arrangements for.....	42, 113
Counseling and Placement of.....	26, 104, 112, 113
Employment Opportunities for.....	42, 53, 113
Extent of Labor Force Participation.....	10, 59
Training of .....	42, 59, 67, 70, 105, 112
Women's Bureau .....	42, 113
Woog, David H.....	106, 107
Work Concepts .....	48
Working Conditions .....	37, 60, 61, 81, 82, 86
Wright, Earl .....	53
Wu, Song, John W.....	78

## X

Xavier University .....	115
-------------------------	-----

## Y

Yale University .....	69, 70
Yosemite Junior College District.....	88
Young, Harding B.....	47
Youth	
Disadvantaged .....	61, 66, 74, 99, 112
Dropouts .....	37, 63, 93, 115
Educational Background of.....	112
Effect of Environment on.....	57, 66
Employment and Unemployment of... ..	11, 24, 30, 66, 94
Military Rejectees .....	35, 110
Perception of Economic Opportunities.....	47
Rural .....	30, 98, 109
School vs. Labor Force Participation.....	48
Training of (See also Neighborhood Youth Corps) .....	37, 74, 99, 111, 112
Work Attitudes of.....	24, 63

## Z

Zarka, C. ....	107
----------------	-----

THE LIBRARY OF  
JAN 17 1968  
CONTINUING EDUCATION

U.S. DEPARTMENT OF LABOR  
MANPOWER ADMINISTRATION  
Office of Manpower Policy, Evaluation, and Research  
WASHINGTON, D.C. 20210  
OFFICIAL BUSINESS

POSTAGE AND FEES PAID  
U.S. DEPARTMENT OF LABOR

FRANK J. VAUGHAN - LIFE 500  
107 BONEY LANE  
SYRACUSE N.Y. 13210

